This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

3 2044 103 248 522

PLAYFAIR

BIBLIOGRAPHY OF THE BARBARY STATES

MARKHAM

HUDSON'S BAY AND STRAIT

117
6

HARVARD
LAW
LIBRARY

117
6

5466

117
6

ROYAL GEOGRAPHICAL SOCIETY.

SUPPLEMENTARY PAPERS.

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL, AND EDITED BY THE ASSISTANT SECRETARY, 1, SAVILE ROW.

Vol. II. Part 4.

CONTENTS.

I. THE BIBLIOGRAPHY OF THE BARBARY STATES. PART I. TRIPOLI AND THE CYRENAICA. (*With a Map.*) By Sir R. L. PLAYFAIR, K.C.M.G., ETC. .. 557

II. HUDSON'S BAY AND STRAIT. By Commodore A. H. MARKHAM, R.N. 615

III. INDEX AND TITLE TO VOL. II. 661

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1889.

117
6

THE

BIBLIOGRAPHY

OF

THE BARBARY STATES.

PART I.

TRIPOLI AND THE CYRENAICA.

(*WITH A MAP*).

BY

SIR R. LAMBERT PLAYFAIR, K.C.M.G.,

H.M. CONSUL-GENERAL FOR ALGERIA AND TUNIS;

AUTHOR OF 'TRAVELS IN THE FOOTSTEPS OF BRUCE'; 'THE SCOURGE OF CHRISTENDOM';
'HANDBOOK (MURRAY'S) TO ALGERIA AND TUNIS';
'HANDBOOK (MURRAY'S) TO THE MEDITERRANEAN,' ETC.

THE BIBLIOGRAPHY

OF

THE BARBARY STATES.

PART I.—TRIPOLI AND THE CYRENAICA.

By Lieut.-Col. Sir R. Lambert Playfair, K.C.M.G., etc.

All that now remains of the three Eastern Barbary States is a Bibliography! Tripoli is a vilayet of the Turkish Empire, and eager eyes are turned towards this part of the Sick Man's inheritance. Tunis is a French Protectorate, and in the natural course of things will one day lose the last shred of its independence. The "famous and warlike city of Algiers" is the capital of a French colony, a prolongation of France. Morocco alone retains its independence and much of its mystery; in spite of its unrivalled position, its ports on either ocean, its perennial streams fed by snow-clad mountains, and its brave and hardy population, it still remains as impenetrable to modern civilisation as ever. But it also has its "question," though the writer hopes to complete its Bibliography before it too "joins the majority."

The complete Bibliography of the Barbary States will contain the following parts:—

I. *Tripoli and the Cyrenaica*, the subject of the following pages.

II. *Tunisia*, by Messrs. Graham and Ashbee, forming originally an appendix to their excellent book of travels,* but which they purpose publishing in a separate form completed to a later date.

III. *Algeria*, already published by the writer in part 2, vol. 2, of the

* 'Travels in Tunisia,' with a glossary, a map, a bibliography and fifty illustrations. By Alexander Graham, F.R.I.B.A., and H. S. Ashbee, F.S.A., F.R.G.S., London: 8vo.; Dulau & Co., 37, Soho Square, 1887.

R. G. S. Supplementary Papers for 1888, pp. 132–430, but requiring a supplement.

IV. *Morocco*, in progress.

The Province of Tripoli is less known to the general public than the three others, and a map has been thought likely to prove serviceable to the student of its literature. It extends along the coast from the island of Djerba to Tobrook, a little beyond the Bay of Bomba, rather more than 800 miles, including all the territory between Tunis and Egypt. Southward it comprises the territory of Fezzan, the town of Ghadames, and the oasis of Ghat. Along the coast, and to about seventy miles inland, there are fertile tracts, but beyond this limit the country is for the most part a barren desert, interspersed at intervals with a few oases.

Nevertheless, it contains many spots of more than ordinary interest, celebrated by the poets and historians of Greece and Rome. The shores of the Syrtis were the terror of navigators, both in ancient and more modern times. Tripoli is the ancient Oea, which, with its neighbouring cities of Leptis and Sabrata, constituted a federal union styled Libya Tripolitana. Beyond this is Cyrenaica, or the Pentapolis, so named from its five Greek cities, Barca, Teuchira, Hesperis, Cyrene and its harbour Appolonia. Under the Ptolemies, Hesperis became Berenice, the modern Bengazi; Teuchira was called Arsinoë, the modern Taucra; and the port of Barca was raised into a city by the name of Ptolemais, the modern Tolemeta. The capital of all this district was Cyrene, the most important Hellenic city in Africa, founded B.C. 631. It gave its name to a well-known philosophic sect, and was the birthplace of many distinguished people, while in commercial importance it almost rivalled Carthage; its cities were adorned with magnificent edifices, and its fountains and forests became the scene of many interesting mythological events. Here were the "dull forgetful waters" of Lethe and the garden of the Hesperides. The army of Cato nearly found a grave in the sands between it and Leptis Magna, and Oea, the capital of the Syrtica Regio, was the birthplace of some of the most prominent characters in Roman history.

Beyond the Cyrenaica and extending to the borders of Egypt was Marmarica, a sandy region stretching inland as far as the oasis of Jupiter Ammon.

After the destruction of Carthage, Tripoli became a Roman province, the coast line subsequently passed into the hands of the Vandals, from whom it was rescued by Belisarius. Then came the most extraordinary movement which the world has ever seen, the sudden rise and extension of Mohammedanism, following the death of its founder, which obliterated every trace of Christianity and civilisation from North Africa.

Since then, with rare and short intervals, Tripoli has remained in the hands of the Mohammedans, the government of the caliphs being

succeeded by various local dynasties, and finally it passed into those of the Sultan in 1835.

This is not the place for a detailed historical or geographical account of the country. The student will find all that can be said on these subjects, though perhaps an *embarras de choix*, in the works herein catalogued.

No attempt at a systematic rendering of oriental names is possible; authors must be held responsible for the orthography of the words used by them.

A BIBLIOGRAPHY

OF

TRIPOLI AND THE CYRENAICA.

1. B.C. 484. **Herodotus.**—See Nos. 96, 266.

2. B.C. 350. **Scylax of Caryanda.**—See No. 96.

3. A.D. 20. **Strabo.**—See Nos. 96, 202.

4. 41. **Mela, Pomponius.**—See No. 24.

5. 77. **Pliny** the Elder.—See Nos. 96, 248.

6. 160. **Ptolemy.**—See No. 96.

7. 160. **Antoninus Augustus.**—See Nos. 94, 96, 216.

8. 238. **Solinus Polyhistor.**—See No. 96.

9. 413. **Paulus Arosius.**—See No. 96.

10. 527. **Procopius of Cæsarea.**—See No. 55.

11. 630. **Isodorus of Hispalis.**—See No. 96.

12. 970. **Ibn Haukal.**—See Nos. 124, 200.

13. 1050. **El-Bekri.**—See No. 267.

13A. 1100. **El-Edrisi.**—See No. 185.

13B. 1300. **En-Noweiri.**—See Nos. 196, 210, 215.

13C. 1330. **Abu 'l Feda, Ismäel.**—See Nos. 118, 119, 121, 190, 194, 199.

14. 1355. **Ibn Batuta.**—See Nos. 168, 238, 239.

15. 1356. **Treaty of Peace and Commerce** between Ahmed Ibn-Mekki, Lord of Tripoli, &c., and the envoy of Venice. Mas-Latrie, Traités, D. pp. 222. See No. 326.

16. 1358. **Protest** and declaration of reprisals of Marco Venier, Venitian ship-owner, against the acts of the Lord of Tripoli. Mas-Latrie, Traités, D. pp. 228.

17. 1362. **Letter of Credence** from Laurentius Celsi, Doge of Venice, to Pierre Sante, Ducal Notary, charged with a Mission to Tripoli. Mas-Latrie, Traités, D. pp. 230.

18. 1375. **Ibn Khaldun.**—See No. 215.

19. 1510. **Sanudo, Marino,** Diary of.—Preserved in the Archives of Venice. Mas-Latrie, Traités, D. pp. 256.

Amongst other interesting matter this contains a letter dated 29th July, 1510, in which Don Pedro Navarro, commanding a Spanish force, reports having taken Tripoli.

20. 1510. **Ferdinand of Arragon,** writing to Henry VIII., informs him that Piedro Navarro stormed Tripoli on the 25th July, with great slaughter. 10,000 of the enemy were slain and the rest taken. Calend. State Papers, For. and Dom. Henry VIII., vol. 1, 1509–1511, No. 1209.

21. 1510. **Privilege** awarded by Ferdinand to the Merchants of Barcelona to trade at Tripoli and Bougie. Mas-Latrie, Traités, D. pp. 336.

22. 1512. **New Privilege** granted by Ferdinand to the inhabitants of Catalonia to trade at Tunis, Algiers, Tripoli and Bougie. Mas-Latrie, Traités, D pp. 341.

23. 1524. **Tripoli** granted by Charles V. to the Knights of Rhodes upon certain conditions. Calend. State Papers, Ven. Ser. 1520–1526. 797–799.

From the original letter-book in St. Mark's Library.

24. 1543. **Pomponius Mela.**—De Situ Orbis. Libri Tres, Basiliae, folio. Many other editions, amongst others,—Opera et Studio, J. Reinoldii, Eton, 4to. 1814. Collection des Auteurs Latins avec la traduction en Français publié par M. Nisard; Macrobe, Varron, Pomponius Mela. Paris: 1845, 8vo, pp. 709.

Mela flourished about the middle of the first century. He examines the three divisions of the globe known to the ancients, and describes Mauritania; Numidia, with its capital, Cirta; Africa, with its cities, Hippone, Rusicada, Utica, Carthage, etc., Leptis, Lake Triton, the Island of the Lotophagi, Oea, the modern Tripoli, and the Cyrenaica with the oasis of Jupiter Ammon.

25. 1551. **Tripoli** taken by the Turks. Calend. State Papers, Foreign Ser., vol. 1547–1553, ed. vi., pp. 163, 165, 170, 172.

"Letters from the Grand Master announce the surrender at discretion of Tripoli; that M. d'Aramon had saved 200 men of note, that the rest of the soldiers, about 500, were put in chains, and others fit for the oar were impressed."

26. 1552. **Salazar y Murdones, P.**—Hystoria de la guerra y pressa de Africa; con la destruycion de la villa de Monatzer y isola del Gozo, y perdida de Tripol de Berberia.

Napoles. fol.

26A. 1553. **Villegagnon, Nicolas Durand de.**—Le discours de la guerre de Malte, contenant la perte de Tripolis et autre forteresses faussement imposée aux Français. Escrit en Latin a Charles V. par le Seigneur Nicolas de Villegagnon, puis traduit en nostre vulgaire par M. N. Edoard. Lyon: 8vo, pp. 123.

27. 1556. **Leo Africanus.** — De Totius Africæ Descriptione, libri ix. Antwerpiae, 1556; Zurich, 1559: 8vo.

The author was an Arab of Granada, named El-Hassan bin Mohammed El-Ouezaz El-Gharnathi, who visited a great part of Africa. He was taken by Corsairs, and baptised by Leo X. His original work was in Arabic, but it has been translated into Latin and into nearly all the modern languages of Europe. The English version bears the title: A Particular Treatise of all the Maine lands and Isles described by John Leo, with map. London: 1600, 4to. A French translation, by Jean Temporal, was published at Lyon, 1556, folio; and an Italian version is given in Ramusio, vol. 1.

The French edition was re-published at Paris at the cost of Government in 1830: 4 vol. 8vo, pp. xlviii., 640; 581; viii., 758; xxiii., 576. The first book treats of Africa in general; the second and third are devoted to Morocco and Fez; the fifth, sixth and seventh refer to various parts of Algeria, Tunis, Tripoli and the Cyrenaica.

Though Leo was a native of Granada, he went to Africa at a very early age and studied at Fez and Morocco; visited Timbuctou and many parts of the Barbary States before his conversion to Christianity. An interesting biographical sketch of this remarkable man is given by Berbrugger, Rev. Afr. vol. ii. 1858, p. 353.

28. 1560. **Views of Tripoli.**—Two very curious views of Tripoli about this date exist. One is in the British Museum (Press Mark 642, 10). The other is in the Public Record Office (see No. 1 of the Tripoli Archives). Both show the Quadrifrontal Arch entire and separate, and in the latter the town is being besieged by the army of Philip of Spain. Both are probably published at Venice, and the former is ascribed to D. Zenoi.

29. 1560. **Cirni, Ant. Fr.** Successi dell' Armata Catholica destinata all' impresa di Tripoli de Barbaria. Venetia: 8vo. Reprinted at Florence in 1567. 8vo.

30. 1561. **Naval engagement** between the Galleys of Philip of Spain and the Morres of Tripoli, in which the former were vanquished. Calend. State Papers—1561–1562, 300.

31. 1561. **Carrelières, Th. de.** Histoire de l'entreprise de Tripoli et prise de Gerbes par les Chrestiens en 1559. Lyon: 12mo.—See also Calend. State Papers, London. Foreign 1559–60, 859.—1066.—l.c. 1560–61, 450, 564.

32. 1566. **Ulloa, Alphonso de.** La historia dell' impresa de Tripoli di Barberia, della presa del Pegnon di Velez della Gomera in Africa et del successo della potentissima Armata Turchesca venuta sopra l'isola di Malta, l'anno 1565. Venetia: 4to, pp. 87. With a preface by G. B. Tebaldi. A second edition. Venetia: 4to, 1569.

33. 1568. **Bertelli, F.** Civitatum aliquot insigniarum, &c. Ven.: 4to.
A collection of prints, one of which is of Tripoli.

34. 1568. **Nicolas de Nicolai,** Segnieur d'Artefeuilte. Ses premiers quatre livres des navigations et peregrinations orientales. Lyon: folio, pp. 181, with numerous illustrations.

The author was Valet de chambre and Geographer in Ordinary to King Charles IX. There are many editions. Chap. xviii. treats of the "Fondation de la Cite de Tripoly."

35. 1573. **Marmol-Caravajal, L.**—Descripcion General de Affrica. Con todos los sucesos de guerras que a avido entre los infieles y el pueblo christiano. Granada: 2 vols. folio.

Marmol was a native of Granada, served in the expedition of Charles V. against Algiers, was taken prisoner, and travelled during seven years and eight months over a great part of North Africa. A French translation was published by d'Ablancourt at Paris in 1667, 3 vols. 4to, pp. 532, 578, 304. Tripoli is described under the heading "Regno de Tvnez. Libro sexto," vol. 2.

36. 1581. **A Treaty** between France and Turkey, dated 6th July, renewed the capitulation with Sultan Amurat, therein styled Sovereign of Algiers, Tunis and Tripoli. See Tab. des Étab. Franç. en Alg. 1841, p. 416. See No. 195.

37. 1583. **Sanders, Thomas.**—See Hakluyt; also published separately at London in 1587: 4to.

38. 1588. **Sanuto, M. Livio.**—Geografia distinta in xiii. libri, &c., con xii. tauole di essa Africa in dissegno di rame.

Venezia, folio, pp. 146, with a copious index and 12 maps. Only one vol. was ever published. At pp. 64–66 is a description of Tripoli and the Cyrenaica.

39. 1588. **Marcellinus, Ammianus.**—Lives of the Emperors from Constantine to Valens and Gratian. V. Sylburgius Historiæ Romanæ Scriptores Latini minores. vol. ii. Also, Collection des Auteurs Latins avec la traduction en Français. M. Nisard, Paris: 1849.

40. 1597. **A Treaty** between Henry IV. of France, and Sultan Mahomet III. of Turkey, dated 25th Feb., confirmed the privileges granted to ambassadors, consuls and merchants in the Levant and Barbary, specifying Algiers, Tunis and Tripoli, and conceded the Coral Fishery to France. See Tab. des Étab. Franç. en Algérie, 1841, p. 416.

41. 1599. **Hakluyt, Rev. Richard.**—The Principal Navigations, Voyages, Traffiques, and Discoveries of the English Nation made by sea or overland, to the remote and furthest distant quarters of the earth, at any time within the compasse of these 1600 yeres, &c. London: folio, 2 vols. pp. 620, 312—204. B.L.

Vol. ii. part i. contains The English Voyages made by and within the Streight of Gibraltar.

The following have reference to Tripoli:—

42. Page 177. A Letter of the English Ambassadors (W. Hareborne) to M. Edward Barton, enclosing the next-named "Commandement."

43. Page 177. The Commandement of the Grand Signior, obtained by Her Majesties Ambassador, M. Will. Hareborne, for the quiet passing of her subjects to and fro his dominions, sent in 1584 to the Viceroys of Algier, Tunis and Tripolis in Barbary.

44. Page 178. A Letter of the Hon. M. Will. Hareborne, Her Majesties Ambassador with the Grand Signior, to M. Tipton, appointing him Consul of the English in Algier, Tunis and Tripolis of Barbarie, dated 30th March, 1585.—Tipton had already held this position at Algiers in an unofficial manner, for some time.

45. Page 184. The voyage made to Tripolis in Barbarie, in the yeere 1583, with a ship called the *Jesus*, wherein the adventures and distresses of some Englishmen are truely reported, and other necessary circumstances observed. Written by **Thomas Sanders.** This voyage was under the auspices of the Turkish Company. The vessel was plundered, the master, Andrew Dier, was hanged, and the crew were doomed to slavery, and only released owing to the intercession of Queen Elizabeth at the Sublime Porte.

46. Page 191. Correspondence regarding the restitution of the shippe called the *Jesus* and the English captives detained in Tripolie in Barbarie and for certain other prisoners in Argier. 1584.

A new edition, with additions, was published in 1809 and following year. This work has recently been reprinted by Messrs. E. & G. Goldsmid, of Edinburgh.

48. 1603. **Knolles, Richard,** Fellow of Lincoln's College, Oxford.—The General History of the Turkes, from the first beginning of that nation to the rising of the Othoman Familie, with all the notable expeditions of the Christian Princes against them, &c. London: folio, pp. 1152.

The history is followed by "a brief discourse of the greatness of the Turkish Empire."

49. 1610. **Tonsis, Battistino de.**—Historia della guerra di Tripoli di Barbaria.

50. 1614. **Purchas, Samuel.**—His Pilgrimage, or relation of the world and the religions observed in all ages and places, &c. London: 9 books, in 1 vol. folio, pp. 1047.

Chapter viii. of the 6th book treats of 'that part of Barbarie now called the Kingdom of Tunis and Tripoli.' With map. Several other editions.

51. 1620. **Mala, Petro.**—Relazione della presca fatta ai Turchi dalle galere di Francia in Barberia. 8vo.

52. 1625. **Purchas, Samuel,** "Parson of St. Martins neare Ludgate."—His Pilgrims in 5 bookes (4 vols.). London: folio, pp. 1973.

At vol. ii. p. 874. The Description of Alger, written by Nicholas Nicholay, ... and also of Malta and Tripolie.

53. 1649. **Dan, Le Rev. P. Fr. Pierre,** Supérieur de l'ordre de la S. Trinité au Chasteau de Fontaine-bleau.—Histoire de Barbarie et de ses corsaires, des royaumes, et des villes d'Alger, de Tunis, de Salé et de Tripoli. Paris: folio, pp. 489.

From p. 250 to 255 is more especially devoted to Tripoli. There were but few slaves there in the author's time.

54. 1650. **Birago Avogadro, Dr. Gio. Batt.**—Historia Africana, della divisione dell' Imperio degli Arabi. E dell' origine e dei progressi della Monarchia de' Mahometani distesa per l'Africa e per le Spagne. Venitia: 4to, pp. 445.

P. 300, Tripoli confederata di Algieri.

P. 324, Tripoli posseduta da Goti.

——— A French translation by M[ichel] d[e] P[ure]. Paris, 1666, 18mo, pp. 262.

55. 1653. **Procopius of Cæsarea.**—Several editions of the original exist, and one English translation by **Sir Henry Holcroft.**—History of the Warres of the Emperour Justinian, 8 books. London: folio, 1653.

This translation is exceedingly rare. No copy exists in the British Museum or the Advocates' Library in Edinburgh; there is one at the Bodleian, and another at Aberdeen.

56. 1654. **Chaulmer.**—Le tableau de l'Afrique où sont représentés les royaumes, républiques, principautés, îles, presqu'îles, forts, &c., de cette seconde partie du monde. Paris: 12mo, pp. 359.

Chap. II. Section V. treats of Tripoli, the Cyrenaica and the Marmarica.

57. 1654. **Tabula Peutingeriana,** ex edit. G. Harini, Amst. See Appendix to Shaw, No. 96. Also 'La Table de Peutinger d'après l'original conservé à Vienne, par Ernest Desjardins.' Paris: 1869.

58. 1655. **Sanson, Nicolas,** d'Abbeville.—Partie de la Coste de Barbarie en Afrique, où sont les Royaumes de Tunis et de Tripoli et pays circonvoisins, tirés de Sanuto. Paris: 4to. No pagination. See No. 19.

59. 1660. **A Chart or View of Tripoli.**—Showing an attack made by boats on a large vessel in the harbour. A drawing, coloured, in the King's Collection, Brit. Mus. (cxvii. 61.) This is followed by another pen-and-ink view of the same town (cxvii. 62).

60. 1662. **Treaty of Peace** between Great Britain and Tripoli, signed by Sir John Lawson, 18th October, 1662. Hertslet's Treaties, vol. i. p. 125.

61. 1667. **De Voornaemste Steden der Werelts.**—The Principall Citties of the World; known as G. van Schagen's collection. Amsterdam: oblong 4to.

Two of the prints, one with the legend in French, represent Tripoli. The latter is the same view as that given in Mortier, No. 86.

62. 1668–70. **Dapper, O.**—Naukerige Beschryvinge der Afrikaenschen Gewesten von Egypten, Barbaryen, Libyen, Biledulgered, Negroslant, Guinea, Ethiopia, Abyssinie. Amsterdam: folio. French translation published 1686, folio. German translation, 1670. See also Nos. 63, 75.

Part iii. treats of the Barbary States, including Tripoli and Barca; part iv. of the Belad et Djerid, and part v. of Libya. It contains a curious view of Tripoli.

63. 1670. **Ogilby, John.**—Africa: being an accurate description of the regions of Egypt, Barbary, Libya, and the Billedulgerid, etc. Folio, maps and plates.

A mere translation of Dapper. The author is a very miscellaneous writer, but an unconscientious plagiarist.

64. 1675. **Treaty of Peace and Commerce** between Great Britain and Tripoli, signed by Sir John Narborough, 5th March, 1675–76. (Renewed by Article xxv. of the Treaty of 1716.) Hertslet's Treaties, vol. i. p. 128.

65. 1676. **Hollar, W.**—Links oben Tripoli in Barbary. A separate print. See Parthey, No. 1203. Very rare.

66. 1675. **Seller, John,** Hydrographer to the King.—Atlas Maritimus, or the Sea Atlas, being a book of Maritime Charts describing the sea-coasts, capes, headlands, etc., in most of the known parts of the world. London: folio. One of them is a bird's-eye view of Tripoli, coloured, engraved by Hollar.

67. 1676. **Relatione** del Nuovo incendio seguito alli 24 di febrero 1676 tra le navi inglese et quelle de Tripoli de Barbaria. Milano: 4to.

68. 1676. **Narrative** of the burning of four men-of-war at Tripoli. London: folio.

69. 1685. **A Treaty** was signed between France and Tripoli after the bombardment of the latter town by the Duc d'Estrées. The Tripolitans restored 600 Christian slaves, two French vessels, and paid a large indemnity. Tab. des Étab. Franç. en Alg. 1841, p. 420.

70. 1685. **Tripoli le 16 Maggio, 1685.** Distinto Raggeruglio gionto per lettera particolare ad un Mercante nel porto d'Ancona. Roma, Modena, Parma: Sm. 4to, p. 3.

An account of various phenomena which appeared at Tripoli, and the sufferings of some Christian slaves at the hands of the Mohammedans, contained in a collection of tracts in the Brit. Mus., Press mark: $\frac{\text{9135. cc. 1.}}{\text{(1–55.)}}$

71. 1687. **Knolles, Richard.** The Turkish History from the original of that Nation to the growth of the Ottoman Empire, with the lives and conquests of

their Princes and Emperors. With a continuation to this present year, 1687, by Sir Paul Rycant, eighteen years consul at Smyrna. London: folio, 3 vol., pp. 990, 338–606.

At vol. ii. p. 136 is "State of the affairs of England in reference to . . . . Algiers and other parts of Barbary."

72. 1688. **Petit de la Croix.**—Relation Universelle de l'Afrique Ancienne et Moderne. Lyon: 4 vol. 8vo.; and 1713.

73. 1694. **Additional Articles** between Great Britain and Tripoli, signed by Thomas Baker, late Consul-General, 11th October, 1694. Hertslet's Treaties, vol. i. p. 136, and Calend. Treas. Papers, 1557–1696, p. 392.

74. 1694. **Schauplatz barbarischer Slaverei,** oder, von Algier, Tripoli, Tunis, und Salee. Hamburg: 8vo, pp. 124.

75. 1695. **A collection of prints** in the British Museum, Press mark S. 148 (38), contains some most interesting views of places in Africa. Published probably in Amsterdam. The legends are in Dutch and English. No. 5 represents Tripoli. There are also views of Algiers, Djidjeli and Tunis. The volume has no letterpress or title. ? Dapper. No. 63.

76. 1700. **Godefroy, Père, Comelin et Philemon de la Motte,** missionnaires de la très Sainte Trinité et Rédemption des Captifs. Etat des Royaumes de Barbarie, Tripoly, Tunis et Alger, contenant l'histoire naturelle et politique de ces Pais; la maniere dont les Turcs y traitent les esclaves, comme on les rachete; et divers avantures curieuses. Avec la Tradition de l'Eglise pour le rachat ou le soulagement des Captifs. Rouen: 12mo, pp. 263, 270.

The first letter, pp. 1 to 90, is "Etat Chrêtien et politique du Royaume de Tripoli," and contains an interesting account of the state of Christian Slavery there. Other editions published at La Haye, 1704, and at Rouen, 1731.

77. 1700. **Glorioso triumfo** conseguido por quatro galeras de la religion de S. Juan en los mares de Berberia, apressando un vaxel de Tripoli llamado *Sultana*, al 9 de Octobre de 1700. Barcelona.

78. 1702. **P. Schenkii,** Hecatompolis sive totius orbis Terrarum oppida nobiliora centum. Amsterdam: obl. 4to.

A collection of coloured engravings, of which one (89) represents Tripoli.

79. 1705. **Harris, John, A.M.** Navigantium atque Itinerantium Bibliotheca, or a complete collection of voyages and travels, consisting of above four hundred of the most authentic writers; beginning with Hakluit, Purchas, &c., in English; Ramusio in Italian; Thevenot, &c., in French; De Bry and Grynæi Novus Orbis in Latin; the Dutch East India Company in Dutch; and continued with others of note, &c., &c. London: 2 vol. folio, pp. 862, 928 and [App.] 56.

Ch. xii. contains ... a short account of Malta and Tripoli; taken from Nicholas Nicolay.

80. 1708. **Allerneuster Zustand** der Afrikanischen Königreiche Tripoli, Tunis, und Algier, von einem gelerten Jesuiten. Aus dem Französischen. Hamburg: 8vo, pp. 124.

81. 1712. **Lucas, Paul.** Voyage du Sieur Paul Lucas, fait par Ordre du Roy, dans la Grèce, l'Asie Mineure, la Macédoine et l'Afrique. Description de l'Anatolie, la Caramanie, la Macédoine, Jérusalem, l'Egypte, le Fioume, et un Mémoire pour servir à l'histoire de Tunis, depuis 1684. Paris: 12mo, 2 vol. illustrated. pp. 410-417.

Ch. x. vol. ii. describes his visit to Mesurata and Tripoli. Chap. xi. a voyage in the mountains of Derna, Cyrene, Bengazi, &c.

82. 1715. **Van der Aa, Pierre.**—La Galerie Agreable du Monde ou l'on voit en un grand nombre de cartes et de Belles Tailles-Douces, les principaux Empires, &c. Le tout mis en ordre et executé à Leide: sm. folio.

Plates Nos. 13a and 14 are copies of those previously noticed. No. 75. No. 15 is "Manière de Supplicier les esclaves à Tripoli." The vol. also contains some interesting views of Algiers and Tunis.

83. 1716. **Treaty between Great Britain and Tripoli,** signed by Vice-Admiral John Baker, 19th July, 1716. Hertslet's Treaties, vol. i. p. 137.

84. 1718. **Rowe, Nicholas.** Lucan's Pharsalia, translated into English verse. London: folio, pp. xxv. 446–55.

In Book ix. is an account of Cato's gathering the remnants of the Battle of Pharsalia, and transporting them to Cyrene; a description of the Syrtis follows, and a digression concerning the Temple of Jupiter Ammon.

85. 1720. **Treaty** between the Bey of Tripoli and France, 4th July and 19th Aug., in favour of French commerce. Tab. des Étab. Fr. en Alg. 1841, p. 422.

86. 1720 (?) **Les Forces de l'Europe,** Asie, Afrique et Amerique, ou description des principales Villes avec leurs fortifications. Dessignées par les Meilleurs Ingenieurs, &c. Amsterdam: 4to.

No. 158 represents Tripoli, a mere sketch outline evidently copied from Van Schagen's collection. This one is published by Pierre Mortier.

87. 1724. **Vera . . . relazione** della battaglia seguite in mare tra un vascello corsaro Tripolino e le galere della sagra Religione di Malta con la presa di detto vascello. In Lucca ed in Bologna: 4to.

88. 1725. **Laugier de Tassy, N.**—Histoire du Royaume d'Alger. Amsterdam: 12mo, maps.

The author was Commissaire de la Marine for the King of Spain in Holland. His work was pirated in English by Morgan in 1728 and 1750, and it has been translated into several other languages.

It was also pirated in French, 'État Général et particulier du Royaume et de la ville d'Alger, et de son gouvernement, &c.' La Haye: 1750, 12mo. A new edition of the original work was published in 1732 under the title: 'État d'esclavage des Chrétiens au Royaume d'Alger avec celui de son gouvernement, &c.' Amsterdam: 8vo, pp. 300. The author copies freely from Marmol. A Spanish edition was published at Barcelona in 1733, pp. 340, with maps and view of Algiers.

89. 1729. **Treaty** between France and Tripoli, dated 9th June.* Tab. des Étab. Fr. en Alg., 1841, p. 422.

90. 1731. **Godefroy, le P.**—État des Royaumes de Barbarie, Tripoly, Tunis et Alger; contenant l'histoire politique et naturelle de ces païs—La manière dont les Turcs y traitent les esclaves, comme on les rachète et diverses aventures curieuses —Avec la tradition de l' Église pour le rachat des captifs. Rouen: 12mo.

91. 1731. **Condamine, de la.**—Voyage en Barbarie et en Orient. MS. Bibliothèque Nationale, Paris.

---

* Confirmed on the 30th June, 1793.

92. 1732. **Cellarius, Christophorus.**—Notitiae orbis antiqui, sive geographiae plenoris Tomus alter Asiam et Africam antiquam exponens. Vol. ii. Lipsiae: 4to, pp. 970.

Lib. iv. cap. ii. p. 838, De Marmarica et Pentapoli Cyrenaica. Cap. iii. De Regione Syrtica. Cap. iv. De Africa Propria, sev. Carthaginiensi. He mentions that no part of the coast of Africa was called *Tripolis* till the close of the 1st century.

93. 1733. **Hebenstreit, J. E.,** Professor of Medicine at the University of Leipzig.—De Antiquitatibus romanis per Africam repertis. Leipzig: 4to.

94. 1735. **Antonini** Augusti Itinerario.—See Appendix to Shaw, No. 96.

95. 1735. **D'Arvieux, Le Chevalier,** Consul d'Alep, d'Alger et de Tripoli.—Mémoires de .... mis en ordre par le R. P. Jean-Baptiste Labat, de l'ordre des Frères Prêcheurs. Paris: 6 vol., 12mo.

At vol. 5, p. 413 is "Mémoire presenté au Roi pour reprimer l'insolence des Corsaires de Tripoli d'Afrique et pour les forcer à une paix avantageuse aux sujets de S. M."

96. 1738. **Shaw, Thomas,** D.D., F.R.S., Fellow of Queen's College, Oxford.—Travels and Observations relating to several parts of Barbary and the Levant. Oxford: folio, pp. xv., 442, 60; second edition, 4to.

Dr. Shaw was chaplain to the Consulate at Algiers. This is one of the most valuable works ever written on North Africa. See 'Quarterly Review,' vol. xcix. p. 331.

He does not allude to Tripoli, but in an Appendix he gives:—Sylloge excerptorum ex veteribus Geographis Historicis, &c., or a collection of such extracts from the old Geographers, Historians, &c., as chiefly relate to that part of Africa or Barbary known by the name of the Kingdom of Algiers and Tunis, as follows:—Herodoti Halicarnass Histor., Libro iv., Lug. Bat. 1715. Scylacis Caryandensis Periplo, Oxon. 1698. Strabonis Rerum Geographicae, Libris ii. et xvii., Amst. 1619. Cl. Ptolemæi Geographiæ, Libro iv. et viii., Amst. 1619. Pomponio Mela, De Situ Orbis, Iscæ Dumnon., 1711. C. Plinii Secundi Hist. Naturalis, Libro v., Par. 1685. J. Solini Polyhistore, Traj. ad Rhen. 1685. Antonini Aug. Itinerario, Lug. Bat. 1738. Æthici Cosmographia, Lug. Bat. 1696. J. Honorii Oratoris excerptis, ibid. Sexti Rufi Breviario Hist. Romanæ, Hanov. 1611. Pauli Orosii Adversus Paganos Historia, Col. 1582. Martiani Minei Felicis Capellæ de Nuptiis Philosophiæ, Lib. vi., Bas. 1577. Isidori Hispalensis Originum, Lib. xiv., ibid. Collatione Carthaginensi, Notitia Episcoporum Africæ sub Hunerico, Concilio Carthaginensi sub Cypriano, &c.; sive Notitia omnium Episcopatuum Ecclesiæ Africanæ; quæ præfigitur S. Optuli de Schism. Donatistarum Libris septem, opera et studio M. Lud. Ell. Du Pin, Antuer. 1702. Notitia utraque Dignitatum cum Orientis tum Occidentis, ultra Arcadii Honoriique tempora, Lugd. 1608. Ravenate anonymo, Amst. 1696. Tabula Peutingeriana, ex edit. G. Hornii, Amst. 1654. [This table, which is indispensable for students of the Ancient Geography of North Africa, has been reproduced in autograph from the original MS. in the Imperial Library at Vienna by B. Chambrier, "Commis auxiliaire au Secrétariat du Conseil de Gouvernement du Gouvernement Général de l'Algérie."]

Shaw's work was translated into French, and published at La Haye, 1743, 2 vol. 4to, carte et figures; and into German, and published at Leipzig, 1765, 4to.

97. 1740. **Bodenehr, G.**—A collection of prints without any published title, Augsberg: fol. Press mark in Brit. Mus., S. 148 (38).

Two of these represent Tripoli.

98. 1740–1751. **An Universal History**, from the earliest times to the present, compiled from original authors and illustrated with maps, cuts, notes, chronological, and other tables. London: folio, 8 vol.

Vol. vii. chap. 7. The history of the Libyans and Greeks, inhabiting the tract between the borders of Egypt and the River Triton, comprehending Marmarica, Cyrenaica, and the Regio Syrtica.

99. 1742. **Tollot, Le Sieur.**—Nouveau voyage fait au Levant, ès années 1731–1732, contenant les descriptions d'Alger, Tunis, Tripoly de Barbarie, &c. Paris: 8vo, pp. 354. See also Piesse Rev. Afr. vol. xi. p. 417.

The author merely touched at Tripoli on his way from Algiers and Tunis to Egypt.

100. 1746. **Hardion, M.**—Histoire de la Ville de Cyrène. Hist. de l'Acad. Roy. des Inscr. et Belles Lettres, t. 3, pp. 391–413. Read 17th Dec., 1715.

Commences an account of the ancient history of Cyrene taken from classic authors. M. Hardion died before it was completed. See No. 113.

101. 1750. **A compleat history** of the Piratical States of Barbary, viz. Algiers, Tunis, Tripoly, and Morocco. Containing the origin, revolutions, and present state of those kingdoms, their forces, revenues, and policies and commerce. With a plan of Algiers and a map of Barbary, by a gentleman (Morgan) who resided there many years in a public character. 8vo.

This was translated into French by Boyer de Prebandier in 1757. The work is of little value; it is a mere translation of Laugier de Tassy, who again copied from Marmol. Morgan was an indefatigable plagiarist.

102. 1750. **Historical Memoir of Barbary**, and its Maritime Power, as connected with the Plunder of the Seas; including a sketch of Algiers, Tripoli and Tunis, an account of the various attacks made upon them by the several States of Europe, considerations on their present means of defence, and the original treaties entered into with them by Charles II.

Another edition published at London in 1815.

103. 1751. **Treaty between Great Britain and Tripoli**, signed by the Hon. Augustus Keppel, Commander-in-Chief in the Mediterranean, and Consul-General Robert White, 19th Sept., 1751.—Hertslet's Treaties, vol. i. pp. 143.

104. 1751. **Nauze, M. de la.**—Histoire du Calendrier Egyptien. Hist. de l'Acad. Roy. des Inscr. et Bell. Lett., t. 16, pp. 170.

At p. 181 is an account of an inscription said to have been taken to France from Tripoli, which had been originally placed in the Amphitheatre of Berenice by the Magistrates and Jews.

105. 1754. **Fréret, Nicolas.**—Observations sur l'époque d'une ancienne Inscriptions grecque apportée de Tripoli d'Afrique en Province et placée dans le Cabinet de M. le Bret. Hist. de l'Acad. Roy. des Inscr. et Bell. Lett. t. 21, pp. 35–225.

This is a decree of the Jews of Berenice ordering an eulogium on M. Titius every new moon.

106. 1754. **Istoria degli Stati di Algeri**, Tunisi, Tripoli e Marocco. Trasportata fedelemente dalla lingua Inglese nell' Italiano. In Londra: 12mo, pp. 376.

107. 1756. **Fréret, M.** Observations sur le rapport des Mesures Grecques et des Mesures Romaines. Mem. de Litt. tirés des Reg. de l'Acad. Roy. des Inscr. and Bell. Let., t. 24, pp. 548–568.

At. p. 554 is a comparison of the measures in the Cyrenaica.

108. 1757. **Histoire des États Barbaresques** qui exercent la Piraterie. Contenant l'origine, les révolutions et l'état présent des Royaumes d'Alger, de Tunis, de Tripoli et de Maroc. Par un auteur (Morgan) qui y a résidé plusieurs années avec caractère public. Traduit de l'Anglois par Boyer de Prebandier. Paris: 2 vol. 18mo, pp. 388 and 287. See No. 101.

109. 1762. **Treaty between Great Britain and Tripoli,** signed by Archibald Cleveland, Esq., H.B.M. Ambassador to the Emperor of Fez and Morocco, on the 22nd July 1762. Hertslet's Treaties, vol. i. p. 151. Cal. State Papers Dom. Ser. 1760–1765, No. 623.

110. 1764. **Anderson, Adam.**—An Historical and Chronological Deduction of the Origin of Commerce. London: 2 vol. folio.

This gives an account of the establishment of Consuls, of whom John Tipton of Algiers, Tunis and Tripoli was one of the first ever appointed.

111. 1766. **Harrison, Commodore Thos.** His Mission to Tripoli. See Cat. Home Office Papers. 1766–69. Nos. 123, 176.

With the original documents (15½ pp.) is a well-executed plan and survey of the harbour of Tripoli.

112. 1771. **Monro, Dr. Alexander.**—Of a pure native crystalised natron or fossil alkaline salt, found in the Country of Tripoli in Barbary. Phil. Trans. Abr. xiii. p. 216.

113. 1774. **Belley, L'Abbé.** Observations sur l'histoire et sur les Monumens de la ville de Cyrène. Mem. de Litt. tirés des Reg. de l'Académie Royale des Inscr. et Bell. lett. t. 37, pp. 363–390.

This is a continuation of M. Hardion's Account, see No. 100.

114. 1775. **Schloezer, August Ludwig von.**—Summarische Gesch. v. Nord-Africa, namentlich, von Marocko, Algier, Tunis und Tripoli. Göttingen, 8vo, pp. 93.

Very little of this work is devoted to Tripoli.

115. 1776. **Borg, Antonio.**—"Piano del Porto di Tripoli e fortificazioni," drawn on a scale of 150 paces to an inch, with a "prospettiva della città di Tripoli." Add. MSS. Brit. Mus. 13, 950, 76.

116. 1781. **Hebenstreit, Joannes Ernestus.**—Vier Berichte von seiner auf Befehl Friedrich Augusts I. im Jahre 1732 in Begleitung einiger anderer Gelehrten and Künstler auf den Afrikanischen Küsten nach Algier, Tunis und Tripolis angestellten Reise.—See J. Bernouillis Sammlung Kurzer-Reisebeschreibungen, &c., Bd. 9–12; also Eyriès, Nouv. Ann. des Voyages, t. xlvi. 1830. pp. 1–90.

117. 1785. **Voyage** dans les États Barbaresques de Maroc, Alger, Tunis et Tripoly, ou lettres d'un des captifs qui viennent d'être rachetés par MM. les Chanoines réguliers de la Sainte Trinité, suivies d'une notice sur leur rachat et du catalogue de leurs noms. Paris: 12mo.

This gives a list of 313 captives redeemed.

118. 1789. **Ismail ibn Ali** (Abu'l Feda).—Abulfedae Annales Muslemici Arabice et Latine opera et studiis J. J. Reiskii. Nunc primum edidit J. G. C. Adler. Hafniae: 1789–94. 4to.

119. 1790. **Ismail ibn Ali** (Abu 'l Feda).—Ismaelis abulfedae annalium Moslemicorum excerpta, quae ad Historiam Africanam et Siculam spectant sub imperio Arabum. Folio. Arab. and Latin.

120. 1790. **Bruce, James.**—Travels to discover the source of the Nile in 1768–1763. Edinburgh: maps and plates, 5 vols. 4to.

This contains a notice of his explorations in Algeria, Tunis, Tripoli and the Cyrenaica before starting for Sicily, Baalbec, Palmyra and subsequently Egypt. A French translation published in Paris, translated by J. Castera in 1790–91.

121. 1791. **Ismail ibn Ali** (Abu 'l Feda).—Abulfedae Africa. Curavit I. G. Eichhorn. Arab. Gottingae: 8vo.

122. 1794. **A Short Account of Algiers,** and of its several Wars . . . with a concise account of the origin of the rupture between Algiers and the United States. Philadelphia: 8vo, pp. 50.

123. 1800. **Rennel, Major James,** Surv. Gen. Bengal.—The Geographical System of Herodotus examined and explained by a comparison with those of other ancient authors and with Modern Geography. In the course of the work are introduced . . . The oasis and Temple of Jupiter Ammon, the ancient circumnavigation of Africa, &c. London: 4to, pp. 766, with 11 maps.

Sect. xxii. Of the Tribes who inhabited the coast and country of Libya between Egypt and Carthage. Sect. xxiii. Concerning the two Syrtes; the Lake Tritonis, &c. Map ix. The coast and country of Libya.

124. 1800. **Ibn-Haukal.**—The Oriental Geography of Ibn Haukal, an Arabian Traveller of the 10th Century, translated by Sir W. Ouseley. London: 4to.

125. 1801. **Treaty** between France and Tripoli, dated 19th June, containing the "most favoured nation" clause. Tab. des Étab. Fr. en Alg. 1841, p. 423.

126. 1802. **Horneman, Frederick.**—Journal of travels from Cairo to Mourzouk the Capital of the Kingdom of Fezzan in Africa, in the year 1797–8. London: 4to, pp. 195, with 2 maps.

The author was employed by the Society for Exploring the Interior of Africa. He went direct from Cairo to Mourzouk, and thence to Tripoli, whence he returned to Mourzouk.

Also a French translation, Paris, 1803, 2 vol. 8vo, with valuable notes by Langles principally from Arab authors.

127. 1802–3. **Cuny, C.**—Tableau historique des decouverts et établissements Européens dans le nord et l'ouest de l'Afrique, jusqu'au commencement du XIX Siècle, augmenté du Voyage d'Horniman dans le Fezzan, et de tous les renseignements qui sont parvenus depuis à la Société d'Afrique sur les empores du Bornou, du Kashna, &c. Traduit par Cuny. Paris: An. xii., 8vo.

128. 1805. **W. E.** (William Eaton)—Interesting details of operations of the American fleet in the Mediterranean. Letter from W. E., an officer, to his friend in the county of Hampshire (Mass.). Springfield: 8vo, pp. 32.

129. 1806. **History of the War between the United States and Tripoli,** and other Barbary Powers, to which is prefixed a Geographical, Religious and Political History of the Barbary States in general. Printed at the Salem Gazette office, Salem, U.S.A.: 12mo, pp. 144.

In an appendix is given a letter from General William Eaton to the Secretary of the Navy, dated 9th Aug., 1805.

130. 1808. **Murray, Alexander.**—James Bruce; account of his life and writings. Edinburgh: 4to, maps and plates.

131. 1812. **Treaty between Great Britain and Tripoli,** signed by Captain Mathew Smith, H.M.S. Comus. 10th May, 1812. Hertslet's Treaties, vol. i. p. 152.

132. 1813. **Blaquière, Edward.**—Letters from the Mediterranean; containing a civil and political account of Sicily, Tripoli, Tunis and Malta; with Bibliographical Sketches, &c. London: 8vo, 2 vol. pp. 652, 460.

The first 105 pp. of vol. 2 are on Tripoli.

A German translation: 'Briefe aus dem Mittelländischen Meere, forms vols. xxv. and xxvi. of 'Neue Bibliothek der wichtigsten Reisebeschreibungen,' &c., von F. J. Bertuch, &c. Weimar: 1815–35, 8vo, 65 vol., maps and engravings.

133. 1813. **Eaton, General William,** Life of.—Brookfield, U.S.A.: 8vo, pp. 448.

At p. 301 is an extract from his journal relating to his march from Alexandria through the desert to Derna.

134. 1813. **Biography of Commodore Decatur.**—The Analectic Maga. Philadelphia: vol. i. p. 502.

135. 1814. **Ali Bey el Abbassi,** Pseudonym of D. Badia y Leblich, a Spanish traveller.—Voyages en Afrique et en Asie pendant les Années 1803–1807. Paris, 3 vol. 8vo, with atlas, long folio, lxxxiii. plates, of which the first, from i. to xii. bis, relate to Morocco. xiii. to xv. relate to Tripoli.

An English version was published at London, 1816, 2 vol. 4to, and a second French edition at Paris, 1884, 3 vol. 12mo.

The author travelled as a Turk; he landed at Tangier, where he saw the Sultan, passed through Meknès to Fez, where he resided a winter, returned to the coast at Larache, where he embarked for Tripoli, and the further East.

Vol. i. chap. xxii. contains an account of Tripoli, with a plan of the great Mosque and copies of several Roman inscriptions.

136. 1816. **Treaty between Great Britain and Tripoli,** signed by Lord Exmouth, 29th April, 1816. Hertslet's Treaties, vol. i. p. 153.

Placing the inhabitants of the Ionian Islands on the same footing as natives of Great Britain.

137. 1816. **Declaration,** signed by the Bey of Tripoli at the instance of Lord Exmouth, providing for the abolition of Christian Slavery, l. c. p. 155.

It is curious that nothing exists on this subject in the Tripoli Archives.

138. 1816. **Janson, W.**—A View of the Present Condition of the States of Barbary; or an account of the Climate, Soil, Produce, Population, Manufactures, Naval and Military strength of Morocco, Fez, Algiers, Tripoli, and Tunis. Also a Description of their Mode of Warfare, interspersed with anecdotes of their Cruel Treatment of Christian captives, illustrated by a new and correct hydrographical map, drawn by J. J. Asheton.

This gives an account of the American War on Tripoli, and of Eaton's expedition from Egypt to Derna.

139. 1816. **Historical Memoirs of Barbary,** as connected with the Plunder of the Seas; including a sketch of Algiers, Tripoli and Tunis, an account of the various attacks made upon them by several States of Europe; considerations of their present means of defence; and the original treaties entered into with them by Charles II. London: 12mo, pp. 112.

The portion devoted to Tripoli and Barca is from pp. 53 to 58. It is without value.

140. 1816. **Hunt, Gilbert F.**—The late War between the United States and Great Britain from June 1812 to February 1815, written in the ancient historical style; containing also a sketch of the late Algerine War, and the Treaty concluded with the Dey of Algiers. New York: 8vo, pp. 334.

The whole work is a poor travesty of Biblical language, very partial to the U.S., and generally untrustworthy, being a mere compilation.

See also two articles in the Analectic Review, Philadelphia, vol. vii. pp. 105–113 and 113–131. The former gives a sketch of the Barbary States; the latter narrates Decatur's expedition against Algiers, Tunis and Tripoli, which proved successful where European fleets had failed.

141. 1816–17. **Marcelli, Steph. Ant.**—Africa Christiana. Brixiae: 3 vol. 4to, pp. 394, 376, 341, with maps of Mauritania, Numidia and Tripolita.

This is the great standard work on the African Church.

142. 1817. **Dümgé, Dr. C. G.**—Ansichten von Tripoly, Tunis und Algier, aus dem Reiseberichten Französischen Missionairs. Stuttgart: 8vo. pp. 120.

143. 1817. **Tully, Richard.**—Narrative of a ten years' residence at Tripoli in Africa, from the original correspondence in the possession of the family of the late Richard Tully, Esq., the British Consul. Written by his Sister. London: 4to, pp. 370, with map and 6 coloured plates.

Reviewed in the Monthly Review, 1818, vol. lxxxvii. pp. 113–121, and the Christ. Observer, vol. xvi. pp. 453–467.

144. 1817. **Leyden, John,** and **Hugh Murray.**—Historical account of Discoveries and Travels in Africa . . . with illustrations of its Geography and Natural History as well as the moral and social conditions of its inhabitants. 2nd edition. Edinburgh: 2 vol. 8vo, pp. 512–535.

Vol. i. p. 296, contains an abstract of Mr. Lucas' journey from Tripoli to Fezzan; p. 417, Horneman's journey to Jupiter Ammon, Fezzan and Tripoli. Vol. ii. p. 209, Voyage of the *Jesus* to Tripoli; p. 230, Shaw's travels in Barbary; p. 252, Tully's Tripoli; at p. 521 there is a bibliography of important works relating to Africa.

The original edition was published in 1799, and a French translation by Cuvillier appeared in Paris, 4 vol. 8vo, with atlas, in 1821.

145. 1818. **Declaration of the Bey of Tripoli,** forbidding his vessels from cruising near any British Port. Signed by Consul-Gen. H. Warrington, 8th March, 1818. Hertslet's Treaties, vol. iii. p. 27.

146. 1819. **Della Cella, Paolo.** Viaggio da Tripoli di Barberia alle Frontieri occidentali dell' Egitto, fatto nel 1817 dal Dottore Paolo Della Cella, e scritto in littera al Sig. D. Viviani. Genoa: 8vo.

An English translation was published at London, 1822: 'Narrative of an Expedition from Tripoli in Barbary to the Western Frontier of Egypt in 1817 by the Bey of Tripoli, in letters to Dr. Viviani, of Genoa, by Paolo Della Cella, M.D., Physician Attendant of the Bey; with an appendix containing instructions for navigating the Great Syrtis. Translated from the Italian by **Anthony Aufrere,** Esq.' London: 8vo, pp. 288. Reviewed in Quart. Rev. vol. xxvi., 1822, pp. 209–229, and in Edin. Rev. vol. xlviii., 1828, pp. 220–235.

Also a French edition: 'Voyage en Afrique au royaume de Barca et dans la Cyrénaïque,' traduit par **A. Pezaut.** Paris, 1840.

The author gives an animated description of what he saw, but his work is superficial.

147. 1821. **Lyon, Capt. G. F., R.N.**—A narrative of Travels in Northern Africa in the years 1818, 1819 and 1820. Accompanied by geographical notices of Soudan, and the course of the Niger. London: 4to, pp. 383, map, and 17 coloured plates.

The author accompanied Mr. Ritchie, who was employed by the British Government, on a mission to Central Africa, where he died. He started from Tripoli, and travelled as far south as 24° N. lat.

A French translation by L. Ed. Gauthier was published in Paris, 1882, 2 vol. 12mo.

See also Tripoli Archives, No. 17.

148. 1821. **Walckenaer, C. A.,** Membre de l'Institut.—Recherches géographiques sur l'intérieur de l'Afrique Septentrionale, comprenant l'histoire des Voyages entrepris ou exécutés jusqu'à ce jour pour pénétrer dans l'Intérieur du Soudan, &c. Paris: 8vo, pp. 525, with a map.

Part iii. p. 249 *et seq.* contains an account of the various routes inland from Tripoli. See also Journ. des Savants, 1822, p. 104.

149. 1821. **Niles, John M.**—The life of Oliver Hazard Parry, with an appendix comprising a biographical memoir of .... Commodores Bainbridge and Decatur. Hartford, U.S.: 12mo, pp. 384.

Bainbridge commanded the *Philadelphia*, which ran ashore at Tripoli, when he and his crew were made prisoners. Both were distinguished in the Barbary War.

150. 1821. **Hutton, Catherine.**—The tour of Africa, containing a concise account of all the countries in that quarter of the globe hitherto visited by Europeans. London: 3 vol. 8vo.

Written as if by an imaginary traveller. Vol. iii. p. 468 *et seq.* refers to Tripoli.

151. 1824. **Jomard.**—Découvertes récentes en Afrique nouvelles tirées du Quarterly Review, Dec. 1823. Bull. Soc. Géogr. Paris, t. 2, p. 11.

152. 1824. **Viviani, D.**—Florae Libycae Specimen. Folio. Genoa.

153. 1825. **Hamaker, H. A.**—Lettres de M. H. Arent. Hamaker à M. Raoul Rochette sur une inscription en caractères phéniciens et grecs récemment découverte à Cyrène. Leyde: 4to, lithographed, 1 plate.

154. 1826. **Denham, Major, Captain Hugh Clapperton,** and the late **Dr. Oudney.**—Narrative of Travels and Discoveries in Northern and Central Africa, in the years 1822, 1823 and 1824. Extending across the Great Desert to 10° N. Lat., and from Kouka in Bornou to Sackatoo, the capital of the Felatah Empire. London: 2 vol. 8vo, 3rd edition, 1828, pp. 471, 465, with maps, plates, and illustrations.

An American edition was published in Boston, 1 vol. 8vo, pp. lxiv. + 255 + 104 + 112.

The authors started from Tripoli, and the two first returned to the same place.—See also Tripoli Archives.

155. 1826. **Letronne, J. Ant.**—Rapport de la Commission nommée par l'Académie pour examiner les résultats du voyage en Cyrénaïque et en Marmarique, par M. Pachô. Journ. des Sav. pp. 166–170.

Project of publication of Pachô's work, l. c. p. 505.

156. 1826. **Malte-Bruin, M.** — Rapport des Commissaires nommés par la Commission Centrale de la Soc. de Géogr. pour examiner les résultats du voyage de M. Pachô dans la Cyrénaïque. Bull. Soc. Géogr. Paris, t. 5, pp. 558–576.

The Society voted him the prize of 3000f.

157. 1826. **Gråberg da Hemsö, Count J. C.**, Danish Consul at Tripoli.—Letter from Tripoli. He gives news of Major Gordon Laing. Bull. Soc. Géogr., Paris, t. 5, p. 680.

158. 1829. **Pachô, Raymond.**—Relation d'un voyage dans la Marmarique, la Cyrénaïque, et les Oasis de d'Audjelah et de Maradeh, pendant les années 1824 et 1825; accompagnée de cartes géographiques et topographiques et de planches représentant les monuments de ces contrées. Paris: 4to, 1827–1829, pp. 404, atlas, fol., 3 maps, and 100 plates.

159. ——— Rapport des Commissaires nommés par la Commission Centrale pour examiner les resultats de voyage de M. Pachô dans la Cyrénaïque.

160. ——— Notice sur la Cyrénaïque lue à la Soc. de Géogr.

161. ——— See also Edin. Rev., vol. xlviii. 1828, pp. 220.

162. 1827. **Gråberg da Hemsö, Comte J. C.**, Swedish Consul.—Commercio di Tripoli. Antologia; Giornale delle Scienze. Florence: 1827, 1828 and 1830. Nos. 81, 88, 111.

Reviewed in the London Magazine, 3rd ser., vol. ii., October 1828, pp. 361–366, under the title "An Account of the Present State of Tripoli." The author states that Tripoli was in a more advanced condition than any of the other Barbary States on account of the hereditary forms of its government.

163. 1827. **L'Investigateur Africain.**—A journal published at Tripoli during a short period, to which M. J. L. Rousseau, French Consul, was a contributor. It was edited by Gråberg de Hemsö.

164. 1828. **Lyman, Theodore.**—The Diplomacy of the United States, being an account of the foreign relations of the country from the first treaty with France to the present time. Boston: 2nd edition, with additions, 2 vol. pp. xii. 470, xii. 517.

Vol. ii. chap. xiii. relates to negotiations with the Barbary Powers, including operations at Tripoli and Eaton's expedition.

165. 1828. **Thrige, J. P.**, Scholae Roeskildensis.—Res Cyrenensium a primordiis inde civitatis usque ad ætatem, qua in provinciæ formam a Romanis est redacta; novis curis illustravit J. P. T. a schedis defuncti auctoris, edidit **S. N. J. Bloch.** Hafniæ: 8vo, pp. 371.

The texts concerning the history of Cyrene taken from Herodotus, Pausanius, Scylax, &c., are brought together. The first edition was published in 1819.

166. 1828. **Beechey, Capt. F. W.**, and **H. W. Beechey.**—Proceedings of the expedition to explore the Northern Coast of Africa from Tripoli Eastward in 1821–22. Comprehending an account of the Greater Syrtis and Cyrenaica, and of the ancient cities composing the Pentapolis. London: 4to, pp. xxiv. 572, xlviii., with 9 maps and 13 plates.

Reviewed in Edin. Rev., vol. xlviii., 1828, p. 220.—See also Tripoli Archives, No. 19. A most exhaustive work.

167. 1828. **Laing, Major Gordon.**—An account of his travels from Tripoli to Timbuctoo and murder near the latter place is given in the Quarterly Review,

vol. xxxviii. p. 100.—See also a French translation of this article in the Bibliothèque Universelle, Genève, 1828, t. xxxix. p. 47.—Also Tripoli Archives, Nos. 23, 26, 27, 30, 31, 32.

168. 1829. **Lee, Samuel, D.D.**—The travels of **Ibn Batuta**, translated from the abridged manuscript copies in the Public Library of Cambridge. Printed for the Oriental Translation Committee. London: 4to, pp. xviii. and 242.

Chap. i. treats of Tangiers, Tilimsān, Milyāna, Algiers, Bijāya, Kosantina, Būna, Tūnis, Sūsa, Safākus, Kābis, Tripoli, &c.

Ibn Batuta left his native city, Tangier, about 1324, and spent two years in making his journey.

169. 1830. **Head, Major F. B.**—The life of Bruce, the African traveller. London: 12mo, pp. 535, with portrait and maps.

At p. 47 is an account of Bruce's travels in Tripoli and shipwreck at Benghazi.

170. 1830. **Jameson, Prof., James Wilson,** and **Hugh Murray.**—Narrative of discovery and adventure in Africa, from the earliest ages to the present time. Edinburgh: 12mo, pp. 492.

This gives a *résumé* of the explorations of Horneman, Laing, Ritchie and Lyon, with a general account of Africa. It forms vol. ii. of the Edinburgh Cabinet Library.

171. 1830. **Russell, Rt. Rev. M.**, Bishop of the Scotch Episcopal Church, Glasgow and Galloway. History and Present Condition of the Barbary States, forming vol. xvii. of the Edin. Par. Lib. Edinburgh: 8vo, pp. 448.

Another edition. 1835.

Chap. v. The Cyrenaica and the Pentapolis.

Chap. vi. Tripoli and its immediate Dependencies.

172. ——— A German translation. Pesth, 1836–37. 'Gemälde der Berberie oder Geschichte und gegenwärtiger Zustand der Staaten Tunis, &c.'

173. 1830. **Gråberg de Hemsö.**—Carta dell' Africa.
See No. 109 of the Antologia.

174. 1830. **Treaty** between France and Tripoli, dated 11th Aug., negociated by Contre-Amiral de Rosamel, abolishing Christian slavery (which had already been abolished by Lord Exmouth in 1816), and generally regulating the relations between the two countries. Tab. des Etab. Fr. en Alg., 1841, p. 424. See also Tripoli Archives, No. 32.

175. 1832. **Papers** explanatory of the circumstances under which Sidi Hassuna D'Ghies has been accused by the Bashaw of Tripoli of having abstracted the papers of the late Major Laing. Blue Book. Folio, pp. 142.

176. 1832. **Shereef Mohamed Hassuna D'Ghies**, Late Minister to the Pacha of Tripoli.—A Statement to the Rt. Hon. Lord Goderich, Sec. of H.B.M. for the Colonies, concerning the expedition of the late Major Laing to Timbuctoo, and the affairs of Tripoli. Blue Book. Folio, pp. 54.

177. 1833. **Pouqueville.**—Mémoire historique et diplomatique sur le commerce et les établissements français au Levant, depuis l'an 500 de J. C. jusqu'à la fin du XVII siècle. Mém. de l'Inst. Roy. de France—Acad. des Inscr. et Bell. Lett. t. 10, p. 513.

This gives an interesting account of the origin of French consulates, and amongst others of those of Tripoli, Tunis, &c., in about 1647.

178. 1835. **Talma, A.**—Reistogtje langs en in eenige havens aan de Spaansche, Fransche, Italiansche en Barbarijsche kusten met de Nederlandsche korvet Dolfijn. Amsterdam: 8vo.

The portion treating of Tunis and Tripoli is from p. 88 to 101.

179. 1835. **Junker, P. S.**—Die Umschiffung Libyens durch die Phönizier. Conitz, 1835. Also Leipzig, 1841.

180. 1835. **Greenhow, Robert.**—Sketches of the history and present condition of Tripoli, with some accounts of the other Barbary States. The Southern Literary Messenger, Richmond, U.S.A., vol. i. p. 65, 128, 193, and vol. ii. 1, 69, 141, 213, 525, 669.

181. 1835. **Avezac, A. P. d'.**—Itinéraires dans l'intérieur de l'Afrique septentrionale, et discussion d'un nouveau canevas géodésique de cette région. Paris: 8vo.

This also appears as Relation d'un voyage dans l'intérieur d'Afrique septent. in the Bull. de la Soc. de Géog., 2 série, t. i. pp. 277 *et seq.*

182. 1836. ——— Études de Géographie critique sur une partie de l'Afrique septent. Itinéraires de Haggy-ebn-el-Dyn-el-Aghouathy, &c. Paris: 8vo, pp. viii. and 188, 1 map.

183. 1836. **Marcus, Louis.**—Histoire de Wandals .... accompagnée de recherches sur le commerce que les états barbaresques firent avec l'étranger. Paris: 8vo. 2nd edition, Paris, 1838. pp. 423+95.

The Vandals never extended their dominion beyond the sea-coast of Tripoli and the Cyrenaica.

184. 1836. **Karl Ritter.**—Géographie générale comparée, traduit de l'Allemand par P. Buret et Edouard Desor. Paris: 3 vol. 8vo.

Vol. iii. p. 210, contains an account of the Plateau of Barca and the Cyrenaica.

185. 1836. **Jaubert, Amédée.**—Géographie **d'Edrisi** traduit de l'Arabe en français, d'après deux MSS. de la Bibliothèque du Roi, et accompagnée de notes. T. i. 1836; t. ii. 1840.

Tripoli and Barca are mentioned at vol. i. pp. 252–285. The Arabic text and French translation were also published by Dozy and Goeje. Edrisi was born at Cueta in 1093.

See also Journ. Asiati. 3 ser. t. xi. p. 362.

186. 1836. **Delaporte, J. D.**, Consul de France à Tanger. Des Antiquités de de Leptis Magna. Journ. Asiatique, 3e ser. t. i. pp. 305–337.

Report written in 1806 to the Prince de Bénévent, Ministre des relations extérieures de l'Empire Français.

187. 1836. **Act of the British Parliament,** providing for Consular jurisdiction in .... Tripoli. Hertslet's Treaties, vol. v. p. 503.

188. 1837. **Ewald, Christn. Ferd.**—Reise von Tunis über Soliman, Nabal, Hammamet, Susa, Sfax, Gabis, Gerba nach Tripolis, und von da wieder zurück nach Tunis, im Jahre 1835. Herausgegeben von Paul Ewald, Nürenberg, Ebner, 1837–38. Large 8vo, 3 parts, 1 map, 8 black and 5 coloured engravings.

189. 1838. **Gibbon, Edward.**—The History of the Decline and Fall of the Roman Empire. London: 8vo, 12 vol.

Vol. iv. p. 286, chap. xxviii. The tyranny of Romanus in the Confederacy of Tripoli, A.D. 366.

Vol. viii. p. 227, chap. xlvi. The Greek colonies of Cyrene exterminated by Chosroes II., A.D. 614.

190. 1839. **Abou'l Féda, Ismael.** Description des pays du Maghreb. Texte Arab avec trad. par Ch. Solvat. Alger: 8vo, pp. 111–99.

191. 1839. **Walkenaer, Baron Ch. Atti.**—Rapport sur les recherches géographiques, historiques, archéologiques, qu'il conviendrait de continuer ou d'entreprendre dans l'Afrique septentrionale. Mém. de l'Inst. Acad. des Insc. et Bell. Lettres, t. xii. pp. 98–134. Also separately, Paris: 4to, pp. 83.

At p. 106 he gives an account of previous explorations in the Cyrenaica and Tripoli.

192. 1839–1853. **Bocking, Edwardus.**—Notitia dignitatum et administrationum, omnium tam civilium quam militarum in partibus orientis et occidentis. Bonnae: 3 vol. (the last being an index), 8vo, pp. 540, 1009, 192. See also Rev. Afr. vol. vi. p. 135 *et seq.*

193. 1840. **Précis analytique** de l'histoire anc. d'Afrique septentrionale. See Tableau de la Situation des Établissements français for 1840. No. 195.

194. 1840. **Abou 'l Feda, Ismael.**—Texte Arabe publié d'après les Manuscrits de Paris et de Leyde aux frais de la Société Asiatique, par **M. Reinaud,** Membre de l'Institut, et le **Bn. MacGuckin de Slane.** Paris: 4to, pp. xlvii. 539.

195. 1841. **Ministère de la Guerre.**—Tableau de la Situation des Etablissements Français dans l'Algérie en 1840. Paris: 4to, pp. 452.

In addition to much valuable information regarding Algeria before and after the Conquest, this volume contains a series of appendices of exceptional interest. The first three relate exclusively to Algeria. No. iv. is a "Précis analytique de l'histoire ancienne de l'Afrique Septentrionale" during the following periods: Carthaginian, Roman, Vandal, Byzantine; including an account of the introduction of Greek civilization into the Cyrenaica. No. v. "Division territoriale établie en Afrique par les Romans." No. vi. "Principaux traités de paix et de Commerce conclus par la France avec les Regences Barbaresques." No. vii. "Bibliographie Algerienne."

196. 1841. **Slane, le Baron MacGuckin de.**—Histoire de la province d'Afrique et des Maghrib, traduite de l'Arabe d'En-Noweiri. Journ. Asiat. 3 ser. tome xi. p. 97 *et seq.*

This commences with the invasion of N. Africa by the Mohammedans in A.D. 647–8.

197. 1841. **Rotalier, Ch. de.** Histoire d'Alger et de la piraterie des Turcs dans la Méditerranée à dater du Seizième Siècle. Paris: 2 vol. pp. 447, 522.

Tripoli taken by the Turks, vol. ii. p. 59.

198. 1841. **Ternaux-Compans, H.**—Bibliothèque Asiatique et Africaine, ou catalogue des ouvrages relatifs à l'Asie et à l'Afrique qui ont paru depuis la découverte de l'imprimerie jusq'en 1750. Paris, Leipsick: 8vo, pp. 279.

A most valuable work. Contains 2803 entries.

199. 1842. **Abou 'l Feda, Ismael.**—Géographie. Trad. Fr. par Reinaud et Guyard. Paris: 1842–1883, 2 vol. 4to.

200. 1842. **Slane, Baron MacGuckin de.**—Description de l'Afrique par **Ibn-Haucal.** Traduit de l'Arabe. Journ. Asiat. 3 ser. t. 13, pp. 153 and 209.

The work commences with a description of the country between Barca and Gabes.

Also Arab. text published by De Goeje, Leyden, 1871. English translation by Ousley, 1800.

201. 1842. **Mannert, Konrad.**—Géographie ancienne des États barbaresques. D'après l'Allemand de Mannert par L. Marcus et Duesberg, avec des additions et des notes par L. Marcus. Paris: 8vo, pp. 803.

Livre i. Libye; Marmarique; Cyrénaïque, &c. pp. 17–231.

202. 1844. **Strabo.**—Strabonis Rerum Geographicarum Libri XVII. Gr. et Lat. Oxonii: 2 vol. folio.

Many other editions.

An English edition of Strabo was published by H. G. Bohn in 1854–7, translated by H. C. Hamilton and W. Falconer. 3 vol. 12mo.

In Book xvii. c. iii. s. 18, is an account of the Syrtis and the Cyrenaica.

203. 1844. **Boeckh, Aug.**—Corpus Inscriptionum Graecarum, auctoritate et impensis Academiae Litterarum Regiae Borussicae, ab Materia collecta ab Augusto Boeckhio, edidit **Joannes Franzius.** Berolini: folio.

Vol. iii. fasc. i. part xxi., Inscriptiones Cyrenaicae.

This contains 237 Greek inscriptions from Cyrene, Ptolemais, Teuchira (Arsinoë), and Berenice.

204. 1844. **Avezac, A. P. d'.**—L'Univers: Esquisse Générale de l'Afrique, Aspect et Constitution physique, Histoire Naturelle, Ethnologie, Linguistique, État Social, Histoire, Explorations et Géographie. Paris: 8vo, pp. 272.

Première partie, La Libye propre, comprenant la Cyrénaïque et la Marmarique, pp. 67–157. Edifices de la Tripolitaine, p. 254.

Two illustrations of Cyrene.

205. 1844. **Zanoski, Jean.**—L'Univers, L'Afrique Chrétienne. Paris: 8vo, pp. 63.

206. ——— Histoire de la domination des Vandales en Afrique. Paris: 8vo, pp. 91.

207. ——— Histoire de l'Afrique sous la domination Byzantine, et appendices. Paris: 8vo, pp. 91, 102.

208. 1844. **Subtil, E.**—Sur les Mines de soufre de la Syrte. Rev. de l'Orient. t. v.

This paper, by the notorious sulphur explorer and adventurer of Tripoli, first induced Richardson to make his celebrated journey to the Sahara.

209. ——— Considérations politiques et commerciales sur Ghadames, suivies d'un Itinéraire de Tripoli à Ghadames. l. c. p. 97–123.

210. 1844. **De Slane, Baron MacGuckin.**—Sur les premiers expeditions des Musulmans en Mauritanie. Lettre à M. Hase, Membre de l'Institut. Paris: 8vo, pp. 39. Extract from Journ. Asiat. No. 9 of 1844.

Reply to M. Hase, who had asked the author if he could find in the writings of Arab authors exact information regarding the first expeditions of the Mohammedans in Africa. He gives a critical examination of En-Noweiri's work, the accuracy of which he disputes. He narrates on the authority of other authors the Arab invasion of the Cyrenaica and Tripoli in A.D. 641–644.

211. 1845. ——— Tripoli et Tunis. Considerations sur la possibilité d'une invasion des Turcs dans la Régence de Tunis par les frontières de Tripoli. Revue de l'Orient, vol. vii. pp. 281–286.

212. 1846. **Fresnel, F.**—Inscriptions Trilingues trouvées en May 1846 à Lebda (Leptis Magna).—Partie Punique avec la transcription Arabe. Journ. Asiat., 4th ser., vol. viii. pp. 349.

213. 1846. **Mackenzie, Alexander Slidell, U.S.N.**—The life of Stephen Decatur, a Commodore in the Navy of the U.S. Boston: 12mo, pp. 443.

This is contained in vol. xxi. of the Library of American Biography, con-

ducted by Jared Sparks. Decatur's brilliant services on the Coast of Barbary are well known; he commanded the Philadelphia, which was captured by the Tripolitans. He subsquently recaptured and destroyed her.—See also N. Amer. Rev. vol. lxiv. pp. 27.

214. 1847. **Richardson, James.**—Touarick Alphabet, with the corresponding English and Arabic letters; Vocabularies of the Ghadamsee and Touarghee languages...with the 3rd Chapter of St. Matthew in the Ghadamsee and Kabail (or Algiers dialect) rendered (interlineally) into Latin by F. W. Newman, &c. London: folio.

215. 1847. **Khaldoun, Abou Zeid Abd-er-Rahman Ibn-Mohammed Ibn-,** Native and Magistrate of Tunis.—Histoire des Berbères et des Dynasties Muslemanes de l'Afrique septentrionale. Translation française par le **Baron MacGuckin de Slane.** Algiers: 4 vols.

The original work is a general history of the Mohammedan world, and is unsurpassed in Arabic literature as a masterpiece of historical composition. It was printed at Bulac, in 7 vols. royal 8vo, A.H. 1284. He was a native of Tunis; taught at Tlemçen; was first the captive and subsequently the friend of Timur, and died at Cairo in A.D. 1406.

At vol. i. p. 301 of de Slane's work are collected some of the most ancient Arab traditions regarding the first invasion of Africa by the Mohammedans, from a history of the conquest of Egypt by **Abd-er-Rahman ibn el-Hakim.** 1. "Conquête de Barca." 2. "Tripoli." At p. 313 are extracts from the great work of **En-Noweri** on the conquest of Africa, an account more detailed than that of Ibn-Khaldoun.

At vol. ii. p. 379 are extracts from **Ibn-el Ataîr.** "Les Siciliens attaquent la ville de Tripoli et détruisent celle de Djidjel." "Prise de Tripoli par les Francs," &c.

216. 1848. **Antoninus, Augustus.**—Itinerarium A. Augusti, ed. G. Parthey and M. Pinder. Berlin: 8vo.—See also Appendix to Shaw. No. 96.

217. 1848. **Orders of the Grand Vizier** to the Pasha of Tripoli for the repression of the Slave trade. Hertslet's Treaties, vol. ix. p. 738.

218. 1848. **Vizirial Letter** to the Pasha of Tripoli prohibiting the Slave Trade. Hertslet's Treaties, vol. xiii. p. 836.

219. 1848. **Richardson, James.**—Travels in the Great Desert of Sahara, in the years 1845–46, containing a narrative of personal adventures during a tour of nine months through the desert, amongst the Touaricks and other tribes of Saharan peoples. Including a description of the oases and cities of Ghat, Ghadames and Mourzouk. London: 2 vol. 8vo, pp. 440, 482, with map and numerous illustrations.

The author started from Tripoli and returned to the coast at Mesrata, having made a journey of 1600 miles.

220. 1848. **MacCarthy, O.**—Voyage dans le grand désert de Sahara en 1845–46 par James Richardson. Rev. de l'Orient, de l'Alg. et des Colon. t. 3, pp. 127–136.

221. 1848. **Bourville, J. Vattier de.**—Lettre à M. Letronne sur les premiers résultats de son voyage à Cyrène. Rev. Arch. t. v. p. 150.

222. 1848. **Letronne, J. Ant.**—Quelques notes sur la lettre de M. de Bourville relative à l'exploration de la Cyrénaïque. Rev. Arch. t. v. p. 279.

223. ——— Deux nouvelles inscriptions Grecques de la Cyrénaïque véritable em-

placement de Cyrène. l. c. p. 432.—See also Journ. des Savants, pp. 370–377. These were found by M. Vattier de Bourville.

224. 1848. **Lenormant, Ch.**—Note sur un Vase Panathénaïque récemment découvert à Bengazi, lue à l'Académie des Inscr. et Bell. Lett. 30 Juin. Rev. Arch. t. v. p. 230.

225. 1849. **Fresnel, Fulgence,** French Consul at Djedda. Mémoire sur le Waday. Bull. Soc. Géogr. Paris, 3 ser. t. 11. pp. 6 to 14.

This paper gives much valuable and original information on the commerce between Waday and the seaports of Bengazi and Tripoli. Corrections and additions to this memoir were published in the following volume; p. 356. It is continued l. c., t. xiii. pp. 82, 341; t. xiv. pp. 153–315.

226. 1849. **Barth, H.**—Wanderungen durch die Küstenländer des Mittelmeeres, Ausgeführt in den Jahren 1845–1847. Berlin: 8vo.

227. 1850. **Jomard.**—Instructions pour le voyage de M. Prax dans le Sahara Septentrional. Mém. de l'Inst. Acad. Inscr. et Bell. Lett. t. xvi. pp. 54–68.

At p. 62 are suggestions relative to the Cyrenaica, &c.

228. ——— Instructions à M. Vattier de Bourville pour l'exploration de la Cyrénaïque, l. c., pp. 68–84.

229. 1850. **Bourville, M. Vattier de.**—Rapport sur les premières fouilles opérées à Benghazi. l. c., p. 91.

230. 1850. **Prax, Lieut. de Vaisseau.**—Régence de Tripoli. Rev. de l'Orient. de l'Algérie et des Colonies (Bull. de la Soc. Orient. in succession to the Rev. de l'Orient), t. vii. pp. 257–280 *et seq.*

From information obtained at second hand.

231. ——— Carte de la Régence de Tripoli, et des principales routes commerciales de l'Intérieur de l'Afrique. Bull. Soc. Géogr. Paris: 3 ser. t. xiv. p. 81.

233. 1850. **Richardson, J.**—Routes of the Sahara. Itinéraires dans l'Intérieur du Grand Désert d'Afrique par . . . Traduit de l'Anglais par M. Albert-Montémont, membre de la Commission Centrale. (Extrait du rapport fait au Foreign Office en 1845–46, par M. Richardson.) Bull. Soc. Géogr. Paris, 3 ser. t. xiii. p. 73, t. xiv. pp. 104–203, 380.

234. 1850. **Testa, E.**—Aanteekeningen wegens de Verkenning, het inkomen en de ankerplaats van de Haven van Tripoli in Barbarye en de winden en stroomen, welke aldaar heerschen volgens plaatselijke waarnemingen verzameld. Amsterdam: 8vo, pp. 82.

235. 1850. **Hoefer, Dr. Fred.**—États Tripolitains. Paris: 8vo, pp. 128.

Two illustrations, one being the Quadrifrontal Arch. From "L'Univers: Histoire et description de tous les peuples."

236. 1850. **Orders of the Grand Vizier** to the Pasha of Tripoli for the repression of the Slave Trade. Hertslet's Treaties, vol. ix. p. 739.

237. 1851. **American Diplomacy** with the Barbary powers. Their piracies and aggressions. Amer. Whig Rev. new ser. vol. ii. (whole coll. xiii.) pp. 27–33.

238. 1852. **Cherbonneau.**—Voyage du Cheikh Ibn-Batuta à travers l'Afrique Septentrionale au commencement du XIVe Siècle. Tiré de l'original Arabe et accompagné de Notes. Paris: 8vo, pp. 88. Reprinted from Nouv. Ann. des Voy. An abstract of Ibn Batuta's great work q. v.

239. 1853. **Ibn Batuta,** Voyages d'.—Texte arabe, accompagné d'une traduction par **C. Defrémery** et le **Dr. B. R. Sanguinetti.** Paris: 4 vol. 8vo, published by the Société Asiatique.

Vol. i. p. 26. The author arrives at Tripoli on his outward journey.

240. 1853. **Rousseau, Alphonse.**—Voyage du Scheikh Et-Tidjani dans la Régence de Tunis. (1306–1309.) Rev. Asiat. ser. v. t. i. p. 102.

This portion of the work contains a history of Tripoli. See page 141.

241. 1853. **Sumner, Charles.**—White Slavery in the Barbary States. London: 8vo, pp. 135.

This contains a notice of the American war with Tripoli. The first edition was published in the U.S. in 1847.

242. 1853. **Richardson, James.**—Narrative of a Mission to Central Africa performed in the years 1850–51 under the orders and at the expense of H.M. Government. Edited by Bayle St. John. London: 2 vol. 8vo, pp. 343, 359, with outline map.

Richardson started from Tripoli; he visited Mourzouk, Ghat, Aghadez, Damerghou, and thence East to Ungurutua, six days' march from Kuka, where he died on the 4th March, 1851.

243. 1854. **Petermann, Augustus.**—An account of the progress of the expedition to Central Africa, performed by order of H.M. Foreign Office, under Messrs. Richardson, Barth, Overweg and Vogel, in the years 1850–51–52–53, consisting of maps and illustrations with descriptive notes, constructed and compiled from private materials. London: folio, pp. 14, 3 maps.

244. 1854. **Smyth, William Henry,** Rear-Admiral.—The Mediterranean: A Memoir, Physical, Historical and Nautical. London: 8vo, pp. 519.

At pp. 85–90 is a description of the Coasts of the Cyrenaica and Tripoli.

245. 1855. **Order of the Porte** to the Pasha of Tripoli for preventing the traffic in slaves from Tripoli to Candia. Hertslet's Treaties, vol. x. p. 602.

246. ——— Vizerial letter on the same subject. l. c., vol. xiii. p. 837.

247. 1855. **Dinomé, l'Abbé.**—Coup d'œil rapide sur les informations obtenues depuis la fin du XVIIIe siècle au sujet de l'intérieur de l'Afrique Septentrionale. Orleans: 8vo.

248. 1855. **Pliny.**—The Natural History of Pliny, translated by Bostock and Riley. Bohn's Classical Library, London: 8vo.

In Book v. is an account of the Syrtes and the Cyrenaica.

249. 1855. **Pellissier de Reynaud, E.**—La Régence de Tripoli. Rev. des Deux Mondes, vol. xii. p. 1.

An excellent account of the Regency, with notices of the various expeditions that had been undertaken in and from it.

250. 1855. **Vogel, Dr. Eduard.**—Reise nach Central-Afrika. Erster Abschnitt; Reise von Tripoli (Durch Tripolitanien, Fessan, Das land der Teda) bis zum Tsad-see, März 1853—Januar 1854. Nach den Original-Documenten, vom Herausgeber, Petermann, Geogr. Mitth. pp. 237–259, with map (that of Richardson, Barth, Overweg and Vogel).

251. 1855. **Barth, Dr. Heinrich.**—Reisen und Entdeckungen in Nord- und Central-Afrika, in den Jahren 1850–1851–1852, 1853, 1854 und 1855. Mit Karten und Holzschnitten. Petermann, Geogr. Mitth. pp. 306–310.—See also l. c., pp. 230, 267.

252. 1856. **Report of the Governor of Tripoli** relative to the prevention of Slave Trade. Hertslet's Treaties, vol. x. p. 1011.

253. 1856. **Testa, Le Ch. E.**, Dutch Consul-General in Tripoli. Notice Statistique et Commerciale sur la Régence de Tripoli de Barbarie. La Haye: 8vo, pp. 34.

The author resided 10 years in Tripoli.

254. 1856. **Malte-Brun, V. A.**—Résumé Historique de la grande exploration de l'Afrique Centrale faite de 1850 à 1855, par J. Richardson, H. Barth, A. Overweg, avec une carte itinéraire. Paris: 8vo, pp. 108.

255. 1856. **Hamilton, James.**—Wanderings in North Africa. London: 8vo, pp. 320, 8 illustrations, all of ruins, &c. in the Cyrenaica.

The author started from Bengazi, visited Cyrene, Derna, Ptolemeita, Teucra, and back to Bengazi; thence eastwards by Angila to Jupiter Ammon, and so to Egypt.

256. 1857. **Barth, Dr. Heinrich.**—Reisen und Entdeckungen in Nord- und Central-Afrika in den Jahren 1849 bis 1855, von H. B. Tagebuch seiner in Auftrag der Brittischen Regierung unternommenen Reise. Mit Karten, Holzschnitten, und Bildern. Gotha: 8vo, 5 Bde.

An English translation of this work, 'Travels and Discoveries in North and Central Africa, being a Journal of an Expedition undertaken under the auspices of H.M. Government in the years 1848–1855." London: 8 vol. 8vo, with many maps and illustrations.

See also Précis des resultats et des informations obtenus par le Dr. B. dans ses Voyages dans l'interieur de l'Afrique; analyse du Ve. vol. et resumé général par l'Abbé Dinomé. Nouv. Ann. des Voy. July, 1859.

257. ——— Die Imosch ark oder Tuareg, Volk und Land. Peterm. Geogr. Mitth. p. 239, plate 11.—See also 'Tour de Monde,' 1866, p. 193 *et seq.*

The portions of Dr. Barth's work treating of the Tripolitaine are vol. i. pp. 1–181 and vol. v. pp. 441–453.

258. 1857. **Macé, Ant. P. Laur.**—Des Voyageurs Modernes dans la Cyrénaïque et le Silphium des Anciens. Paris: 8vo.

259. 1857. **Fournel, Mar. Jér. H.**, Ingénieur des Mines.—Étude sur la conquête d'Afrique par les Arabes: et recherches sur les tribus berbères qui ont occupé le Magreb central. Paris: 4to, pp. 165.

260. ——— Les Berbers, étude sur la conquête de l'Afrique par les Arabes, d'après les textes imprimés. Paris: n. d., 4to.

Both works of considerable importance.

261. 1857. **Een dag te Tripoli.**—Fragment uit dagboek van een zee-officier. Amsterdam, 8vo, pp. 423.

262. 1857. **Orenz, K.**—Die Entdeckungsreisen in Nord- und Mittel-Afrika von Richardson, Overweg, Barth, und Vogel. Leipzig: with map.

263. 1858. **Gottschick, A. F.**, Director des Königl. Pädagogiums zu Putbus.—Geschichte der Gründung und Blüthe des hellenischen Staates in Kyrenaika. Leipzig: 8vo, pp. 40.

264. 1858. **Tripoli.**—Sharpe's London Mag., new ser. vol. xiii. pp. 84–87.

An account of the Regency and the various explorations that had been made in it.

265. 1858. **Vizirial Letter** to the Pasha of Tripoli prohibiting the Slave Trade. Hertslet's Treaties, vol. xiii. p. 837.

266. 1858–60. **Rawlinson, George, assisted by Sir Henry Rawlinson and Sir J. G. G. Wilkinson.**—The History of Herodotus. A new English version, with copious notes and appendices. London: 8vo, 4 vols.

References to Barca; ii. 483, iii. 138, 179. Cyrene, iii. 134, 135, 149, 171. Syrtes, iii. 148. Oea, iii. 291.

Copious notes, with illustrations, regarding the Cyrenaica at vol. iii. p. 132.

267. 1859. **El-Bekri.** Description de l'Afrique Septentrionale, traduit par **Mac Guckin de Slane.** Paris: 8vo, pp. 432.

A description of Tripoli and the Cyrenaica, from p. 11 to p. 44.

268. 1859. **Berbrugger, A.**—Domination Romaine dans le Sud de l'Afrique Septentrionale—Tripolitaine, d'après le Dr. Barth. Rev. Afr. vol. iii. pp. 379–390.

269. 1859. **Schauenberg, Dr. Ed.**—Reisen in Central-Afrika. Zweiter Band. I. Richardson, H. Barth, Ad. Overweg, E. Vogel. Lahr: 8vo, pp. 566, with a map of all the expeditions starting southward from Tripoli.

270. 1860. **Headley, J. T.**—Eaton's Barbary Expedition. Harp. New Month. Maga. vol. xxi. pp. 496–511.

A very full account of this remarkable enterprise.

271. 1860. **Duveyrier, Henri.**—Notes sur la régence de Tripoli. Rev. Alg. et Colon. December.

The author says of this that it was a "simple lettre qui n'était pas destinée à l'impression."

272. 1860. **Heine, Wilhelm.**—Eine Sommerveise nach Tripolis. Berlin: 12mo, pp. 322.

273. 1860. **Muller, L.**—Numismatique de l'Ancienne Afrique—ouvrage préparé et commencé par **C. T. Falbe** et **J. Chr. Lindberg.** Refait, achevé et publié par L. Müller. Copenhague: 3 vol. 4to, and supplement.

Vol. i.—Les Monnaies de la Cyrénaïque. pp. xii. 174.

Vol. ii.—Les Monnaies de la Syrtique, de la Byzacène et la Zeugitane. pp. viii. 188.

Vol. viii.—Les Monnaies de la Numidie et de la Mauritanie. pp. vi. 194.

Supplement. Additional coins from all these regions. pp. iv. 96.

All profusely illustrated. A standard work.

274. 1861. **El-Ya'goubi.**—Descriptio al Maghribi. Leyden: Arab-Latin, 8vo.

275. ——— Specimen e literis orientalibus exhibens Kitabi' l-Boldan, sive librum Regionum auctore Ahmed ibn Abi Yaqub, noto nomine Al-Yaqubi quem auspice viro clarissimo **T. G. J. Juynboll** nunc primum Arabice edidit **Abramus Wilhelmus T. Juynboll.** Lugduni-Batavorum: 8vo, pp. 154.

276. 1861. **Krafft-Krafftshagen, Alexander Freiherrn von** (Hadji Scander).—Tripolis und die Städte der kleinen Syrte. Peterm. Geogr. Mitth. pp. 199.

277. ——— Promenades dans la Tripolitaine, 1860. Tour de Monde, vol. iii. pp. 66–80, with map and numerous illustrations.

The author travelled as a Mohammedan pilgrim.

278. ——— Les Villes de la Tripolitaine. Rev. Arch. Paris, Nouv. Sér., vol. iv. pp. 29.

279. 1861. **Vivien de Saint-Martin.**—Sur les anciens cités de la Tripolitaine. Lue à l'Académie des Inscriptions et Belles-Lettres dans la Séance du 13 Sep. A review of Baron de Krafft's paper last before quoted, and his communication to the Tour de Monde. No. 57, t. iii. 1861, p. 66.

280. 1861. **Laval.**—Topographie Médicale de la ville de Derna, ancienne Cyrénaïque. Gaz. Méd. d'Orient. Constantinople, t. iv. pp. 5–15.

281. 1861. **Duveyrier, Henri.**—Statistique du Djebel Nefoûsa, Montagnes de la Régence de Tripoli. Nouv. Ann. des Voy. August.

282. ——— Relations commerciales de Ghadames (Régence de Tripoli) avec le Soudan. Ann. du Commerce extérieur, No. 1346. June.

283. ——— Reisen und Forschungen im Grenzgebiete von Algier, Tunis und Tripoli. 1860 (Nebst einer Originalkarte), Peterm. Geogr. Mitth. 1861, p. 389, map 13.

284. 1862. **Beurmann.**—Brief des Herrn Maritz von Beurmann an Herrn Dr. H. Barth. Murzuk 27th April. Zeitsch. für Allgem. Erdkunde, vol. xiii. pp. 44.

285. ——— Brief des Herrn M. von Beurmann an Herrn Dr. H. Barth. Ueber einem Ausflug in das Wadi Scherki und seine Abreise nach Bornu. (Hierzu eine Karte Taf. iv.) l. c., pp. 347.

286. ——— Einige Bemerkungen von Dr. H. Barthe zu Herrn v. Beurmann's Kartenskizzen aus Fessan und Barka. l. c., pp. 352.

287. 1862. **Grad, Charles.**—Edouard Vogel, et son exploration de l'Afrique Centrale. Bull. Soc. Geogr. Paris, p. 77.

This is a biographical sketch of Vogel from his birth in 1829 till his murder in 1856, based on his letters and memoirs, published in Peterman's Mitth. and in the Proceedings of the R.G.S.

288. 1862. **Vaux, W. S. W.**—An account of the recent excavations at Cyrene by Lt. R. M. Smith R.E., and Lt. Porcher, R.N. Proceed. Soc. Antiq. Second Ser. vol. ii. p. 96. Also Trans. Roy. Soc. of Liter. vol. vii.

289. 1862. **The Cyrenian Marbles.**—Art Journal, New Series, vol. i. p. 20. An account of the antiquities sent home by Lieuts. Smith and Porcher to the British Museum.

290. 1862. **Reade, Vice-Consul.**—Report on the trade of Tripoli for 1861. Consular Comm. Reports, 1862, p. 336.

291. 1862. **Aquilina, Vice-Consul.**—Report on the trade of Bengasi for 1861. l. c. p. 339.

292. 1862. **De Tremaux, Vice-Consul.**—Report on the trade of Derna for 1861. l. c. p. 341.

293. 1862. **Vivien de Saint-Martin.**—Ueber die Lage der alten Städte von Tripolitanien. Vortrag, gehalten am 13 Sep. 1861 in der Académie des Inscriptions et Belles-Lettres. Peterm. Geogr. Mitth. p. 11, plate 3.

294. 1862. **Tauxier, H.**—Examen des traditions grecques, latines et musulmanes, relatives à l'origine du peuple berbère, l. c., pp. 353 *et seq.*

A *résumé* of this, under the title 'Études sur les Migrations des nations berbères,' is given in the Journal Asiat., Oct., pp. 340–54. The writer takes as his point of departure the distribution of Berber tribes at the time of the Arab invasion, and the base of his investigations is of course the celebrated work of Ibn Khaldoun.

296. 1863. **Reade, Vice-Consul.**—Report on the trade of Bengasi for 1862. Consular Comm. Reports, p. 439.

297. 1863. **De Tremaux, Vice-Consul.**—Report on the trade of Derna for 1862. l. c., p. 440.

298. 1863. **Herman, Consul-General.**—Report on the trade of Tripoli for 1862. l. c., p. 441.

299. 1863. **Guys, Charles Edouard,** ancien consul.—Notice sur les îles de Bomba, et Plate, le Golfe de Bomba et ses environs avec la relation d'un voyage sur la côte de l'est et celle de l'ouest de la Régence Tripolitaine. Marseille: 8vo, pp. 56.

300. 1863. **Grad, Charles.**—Les Expeditions Allemandes à la recherche d'Edouard Vogel. Nouv. Ann. des Voy., May and June.

301. 1863. **Tauxier, H.**—Ethnographie de l'Afrique septentrionale au temps de Mahomet. Rev. Afr. vol. vii. p. 453.

302. 1863. **Duveyrier, Henri.**—Les Touâreg du Nord. Paris: 8vo., pp. xxxiv. 499, and Supp. pp. 37, Map and xxv. Plates.

A very important work for which the Geographical Society of Paris awarded its Gold Medal. M. Duveyrier started from Constantine in 1859, proceeded to the country of the Beni M'Zab, thence to El Golea and other parts of the Algerian Sahara. He subsequently explored the Tunisian Sahara, Ghadames, Rhat, Mourzouk, and Zouila, reaching Tripoli by the long route of the Sokna. The journey lasted during three years. In a first appendix the author treats of the ancient geography of the country. In a separate appendix, M. Bourguignat describes the Mollusca observed, with 3 plates, and M. Cosson the new plants, 3 plates.

303. 1863. **Amari.**—I Diplomi arabi del reale archivio Fiorentino. Firenze: 4to.

This valuable work contains, amongst others, 41 documents connected with Florentine relations with Tripoli and the other Barbary States.

304. 1863. **Mission de Ghadamès.**—Septembre, Octobre, Novembre, et Decembre, 1862. Rapports officiels et documents à l'appui. Alger: 8vo, pp. 358, with numerous illustrations.

This mission was sent by the Governor-General of Algeria, and was commanded by **Colonel Mircher.** With him were associated Capitaine de Polignac, l'Ingénieur Vatonne, l'Aide-Major Hoffman and the Interpreter Ismael bou Derba. Its object was to open commercial relations with the great markets of the Soudan. It went by sea to Tripoli, and thence to Ghadamès by El-Oued. See also Rev. des deux Monde and Bull. Soc. Géogr. Paris, 2e Sem. p. 405.

305. 1863. **Vivien de Saint-Martin.**—Le Nord de l'Afrique dans l'antiquité Grecque et Romaine, Étude Historique et Géographique. Ouvrage couronné en 1860 par l'Académie des Inscription et Belles-Lettres. With 4 maps. Paris: 8vo, pp. xx. 519.

Section ii. L'Afrique d'Hérodote, Art. ii. s. 3. Les tribus de la région littorale depuis la frontière d'Egypte jusqu'à l'entrée du territoire Carthaginois. —See also Petermann, Geogr. Mitth. 1862, p. 11; Jour. des Sav. p. 398.

306. 1863. **Petermann, A., und B. Hassenstein.**—Inner-Afrika, nach dem Stande der Geographischen Kentniss in den Jahren 1861 bis 1863. Gotha: 4to, pp. 164, with 10 sections of their great map of Africa.

The first only refers to Fezzan.

307. 1864. **Rousseau, Alphonse,** Consul de France.—Annales Tunisiennes. Alger: 8vo, pp. 571.

At p. 88 is an allusion to the siege of Tripoli by the Tunisians, and to the plague of 1708.

308. 1864. **De Champlouis, M. Nau,** Capitaine au Corps Impérial d'État-major.—Notice sur la carte de l'Afrique sous la domination des Romains, dressée

au Dépôt de la Guerre d'après les travaux de **M. Fr. Lacroix,** par ordre de S.E. le Maréchal Comte Randon, Min. de la Guerre. Paris: 4to, pp. 46.

The map in question is in two large sheets (2,000,000°), and includes the whole district between the Cyrenaica and the Atlantic. See also L'Ann. Géogr., t. iii. p. 110.

309. 1864. **Mas Latrie, Le Comte L. de.**—L'Afrique sous la domination des Romains. Paris.

310. 1864. **Smith, Capt. R. Murdoch, R.E.,** and **Commander E. A. Porcher, R.N.**—History of the recent discoveries at Cyrene, made during an expedition to the Cyrenaica in 1860–1861, under the auspices of H.M. Government. London: Imp. 4to, pp. 98.

Superbly illustrated, with 12 maps and plans, 22 plates in double-tinted lithography, 16 photographs, 10 plates of Greek inscriptions, and 26 woodcuts.

311. 1864. **Reade, Vice-Consul.**—Report on the trade of Bengasi for the half-year ending 30th Nov. 1863. Cons. Comm. Reports, p. 407.

312. ——— Do. for the year ending 31st Dec. 1863. l. c., p. 408.

313. 1864. **De Tremaux, Vice-Consul,** on the trade of Derna for 1863. l. c., p. 410.

314. 1864. **Herman, Consul-General,** on the trade of Tripoli for 1863. l. c., p. 411.

315. 1864. **Sprenger, Aloys.**—Two letters from Africa regarding the murder of Ed. Vogel. Zeitsch. des Morgenland Gesellsch. t. xvii. No. 2, April.

316. ——— On the death of Madlle. Tinné and the botanist H. Schubet. l. c., August.

317. 1864. **Grad, Charles.**—Les expéditions Allemandes à la recherche d'Edouard Vogel de 1861 à 1862; d'Après des lettres et des Mémoires originaux des Membres de la Mission. Nouv. Ann. des Voy., Novembre.

318. 1864. **Petermann, A.**—Neue Karte vom Mittelländischen Meer u. Nord-Afrika. Peterm. Geogr. Mitth. pp. 182, 191.

319. 1865. **Rohlfs, Gerhard.**—Nachrichten von Gerhard Rohlfs aus Tripoli. Petermann, Geogr. Meitth., p. 235.

320. ——— Ausflug von Tripoli nach Lebda. l. c., p. 263.

321. ——— Nachrichten von Gerhard Rohlfs aus Rhadames. l. c., p. 305.

322. ——— Tagebuch seiner Reise durch Marokko nach Tuat. 1864. 1. Abschnitt: Reise von Tanger bis Ued-Sidi-Hassan, 14 März bis 9 Mai 1864. l. c., p. 82, map 4. 2. Abschnitt: Reise von Uled-Sidi-Hassan bis Karsas im Ued Ssaura, 10 Mai bis 25 Juli. l. c., p. 165, map 6. 3. Abschnitt: Reise von Karsas im Ued Ssaura nach ain Salah, 29 Juli bis 17 September, und allgemeine Beschreibung von Tuat. l. c., p. 402, map 14, and 1886, p. 119.

323. 1865. **Primaudaie, Elie de la.**—Le littoral de la Tripolitaine: Commerce, navigation, géographie comparée. Paris: 8vo, pp. 200, with map.

From Nouv. Annales des Voyages, July, August, and September.

324. 1865. **Walker, Acting Cons. Gen.**—Report on the trade of Tripoli for 1864. Cons. Comm. Rep., p. 125.

325. 1865. **Dennis, Vice-Consul.**—Report on the trade of Bengazi for 1864, l. c., p. 660. A full and excellent report.

326. 1866. **Mas Latrie, Comte L. de,** Chef de Section aux Archives.—Traités de Paix et de Commerce et documents divers concernant les relations des Chrétiens avec les Arabes de l'Afrique Septentrionale au moyen âge. Paris: 4to, pp. xxvii. 342 + 402 + 118.

A work of the highest value. It contains—1. A preface; 2. A historical introduction; 3. Documents regarding Christian relations with the Arabs; 4. Supplementary documents.

327. 1866. **Barth, H.**—Sammlung und Bearbeitung Central-Afrikanischer Vokabularien. 3 Abth. Nennwörter. 4to, pp. 143–295.

328. 1866. **Rohlfs, Gerhard.**—Neueste Briefe von G. R. und Rückblick auf seine bisherigen Reisen in Afrika in den Jahren 1861 bis 1865. Peterm. Geogr. Mitth. p. 3, plate 2.

329. ——— Tagebuch seiner Reise von Tuat nach Rhadames, 1864. l. c., p. 8.

330. ——— Nachrichten von Gerhard Rohlfs aus Mursuk. l. c., pp. 118–227.

331. ——— Briefe von G. R. aus Bilma, Mai und Juni 1866. l. c., pp. 356–368.

332. ——— Account of a Journey across the Atlas Mountains and through the Oases Tuat and Tidikelt to Tripoli by way of Ghadames in the year 1864. Proc. R. Geogr. Soc., Lond., vol. ix. No. vi. pp. 312–314.

333. 1866. **Hassenstein, B.**—Mémoire zur Karte von G. Rohlfs Reise durch die Oasen von Tuat und Tidikelt, 1864. Nebst Bericht über Major Laing's Reise 1825 und Duveyrier's Erkundigungen in Nord-Africa. Peterm. Géogr. Mitth. p. 53. For the map in question see l. c. 1865, No. 14.

334. 1866. **Kunth, A.**—Ueber die von Gerhard Rohlfs auf Reise von Tripoli nach Ghadames im Mai und Juni 1865, gefundenen Versteinerungen. Zeitschr. der Gesell. für Erdk. zu Berlin, heft iv. pp. 319–323, with map.

335. 1866. **Dennis, Vice-Consul.**—Report on the trade of Bengazi for 1865. Cons. Comm. Reports, p. 501.

336. 1866. **Drummond Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1865. l. c., p. 497.

337. 1867. **Rohlfs, Gerhard.**—Uebersicht von G. R. Reise durch Afrika, 1866 bis 1867. Peterm. Geogr. Mitth. p. 372, map 12.

338. ——— Reise durch Marokko, Uebersteigung des Grossen Atlas. Exploration der Oasen von Tafilet, Tuat und Tidikelt und Reise durch die Grosse Wüste über Rhadames nach Tripoli. Bremen: 8vo, pp. 207, with map.

339. ——— Résumé de Voyage de Gerhard R. de Tripoli à Lagos, d'Après les Mitth. du Dr. Petermann, lib. x. p. 372, 1867. Bull. Soc. Géogr. Paris, 5e ser. t. 14, p. 395.

340. 1867. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1866. Cons. Comm. Reports, part i. p. 134, and part ii. p. 110.

341. 1867. **Dennis, Vice-Consul.**—Report on the trade of Bengazi for 1866. l. c., part ii. p. 113.

342. 1868. **Brine, Lindesay,** Commander R.N.—On the past and present inhabitants of the Cyrenaica. 88th Meeting of Brit. Ass. Norwich. Notices and Abstracts, p. 181.

A short abstract of the author's visit to that part of the coast between Berenice and the Egyptian frontier in 1867.

343. 1868. **Rohlfs, Gerhard.**—Reise durch Nord-Afrika vom Mittelländischen Meere bis zum Busen von Guinea, 1865–1867. 1. Hälfte; von Tripoli nach Kuka (Fesan, Sahara, Bornu). Gotha: 4to, pp. 75, 2 maps.

344. 1868. **Beulé.**—Découvertes à Cyrène. Journ. des Savants, pp. 273–291. A review of Smith and Porcher's work.

345. 1869. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1868. Cons. Comm. Reports, p. 525.

346. 1869. **Vizirial Letter** to the Governor General of Tripoli relative to the prohibition of the Slave Trade. Hertslet's Treaties, vol. xiii. p. 837.

347. 1869. **Chaunebot, A.** Empire Ottoman. Esquisse d'un projet de Colonisation de la Cyrénaïque. Paris: 8vo, pp. 43.

348. 1869. **Bompois, Ferdinand.**—Médailles Grecques autonomes frappées dans la Cyrénaïque. Notice accompagnée d'explications nouvelles sur différents points de numismatique et d'antiquité. Paris: 8vo, pp. 123, pl. 3.
Published at the office of the Revue Numismatique.

349. 1869. **Rohlfs, Gerhard.**—Leptis Magna. Sabratha. Das Ausland, No. 20, pp. 473–477; No. 22, pp. 522–526.

350. ——— Rapport sur le Voyage de Bengasi à l'Oasis de Jupiter-Ammon, par les Oasis d'Audjila et Djalo. Bull. Soc. Géogr. Paris, June, pp. 465–471.

351. ——— Berenice, Die Hesperiden-Gärten und der Letha-Fluss. Die Jupiter-Ammons-Oase. Das Ausland, No. 41, pp. 969–371; No. 42, pp. 985–989; No. 43, pp. 347–352.

352. ——— Bengasi. l. c., No. 40, pp. 947–952.

353. ——— Audjila und Djalo. l. c., No. 49, pp. 1153–1158.

354. 1869. **Cyrène.**—Article in Larousse, Grand Dict. Univ. du XIXe Siècle, t. v. p. 731.

355. 1869. **Kanitz, A.**—Auszug aus Plantae Tinneanae. Vindobonae: 1867. Text mit Nachträgen. Berlin: 8vo.

356. 1869. **Belin, M.** Bibliographie Ottomane. Journ. Asiat., ser. vi. t. xiv. p. 71.
Amongst works published at Constantinople is the following:—

طرابلوس غرب تاريخي. Histoire de Tripolie de Barbarie. Mehemmed Behidjeddin efendi, great-grandson of the Cheikh el-Islam Aâchir efendi, who had translated into Turkish the Arabic history of Abou Abd-Allah Mohammed ibn Khalil Ghalboun Tarabloucy.

357. 1870. **Rohlfs, Gerhard.**—Land und Volk in Afrika. Bericht aus den Jahren 1865 bis 1870. Bremen: 8vo, pp. 240.

358. ——— Zur Karte von Cyrenaica. Mit 1 Karte. Zeitsch. der Gesell. für Erdk. zu Berlin. 5 Bund. 4 Heft. pp. 370.

359. 1870. **Nachtigal, Dr.**—Relation de la mort de Mademoiselle Alexina Tinné, et voyage au Tibesti. Lettre à M. Henri Duveyrier; dated Mourzouk, 2nd Dec. 1869. Bull. Soc. Géogr. Paris, 5 sér. t. xix. p. 89.
Dr. Nachtigal and Mademoiselle Tinné left Mourzouk together, the former for Bournou, the latter for Tibesti. She was killed, and her caravan pillaged by the Touaregs, no doubt from cupidity. This letter is followed by observations by M. H. Duveyrier, and by an account of Nachtigal's journey to Tibesti.

360. 1870. **Nachtigal, Dr.**—Reise Dr. G. N——'s nach Tibesti aus brieflichen Mittheilungen. Schreiben Dr. N——'s an Dr. A. Bastian. Mit 1 Karte. Zeitschr. Gesell. für Erdk. zu Berlin. 5 Bd. 1 Heft, pp. 69–75.

361. ——— Briefe des Herrn Dr. —— an Herrn Dr. A. Bastian. l. c., 3 Heft. pp. 265–269.

362. ——— Die Tibbu. Ethnographische Skizze. l. c., 5 Bd. pp. 216–242.

363. 1870. **Zurcher et Margolle, MM.**—Mademoiselle Tinné, 1861–69. Le Tour du Monde, No. 566, pp. 289–304.

A Biography of Mademoiselle Tinné, and an account of her murder near Mourzouk.

364. 1870. **Segni, P. Philippe da.**—Viaggio da Tripoli di Barbaria al Bornou nel 1850. Boll. della Soc. Geogr. ital., Fasc. 4, pp. 137–150.

365. 1870. **Wiet, E.**—La Tripolitaine. Bull. Soc. Géogr. Paris, July to Dec., 5 ser. t. xx. pp. 175–193.

Communicated by the Ministère des Affaires Étrangères. This includes an account of Bengazi, Tolemeïta, Derna, Bomba and Tobrouk.

366. 1870. **Dennis, George.**—On recent excavations in the Greek Cemeteries of the Cyrenaica. Trans. Royal Soc. of Lit., 2 ser. vol. ix. pp. 135–182, with 4 illustrations.

A valuable paper, though the author describes his experience as "a tale of fruitless labours and repeated disappointments."

367. 1870. **Maltzan, Heinrich, Freiherrn von.**—Reise in den Regentschaften Tunis und Tripolis. Nebst einem Anhang: Ueber die neuentdeckten phönicischen Inschriften von Karthago. Mit Titelkupfer, Plan von Tunis und 59 lithographirten Inschriften. Leipzig: 8vo, 3 vol. pp. 404, 436, 386.

The third volume is devoted to Tripoli.

368. 1871. **Die Wehrkraft** des Osmanischen Reiches und seiner Vasallen-Staaten Egypten, Tunis und Tripolis. Wien: 8vo, pp. 107.

369. 1871. **Rohlfs, Gerard,** von Tripolis nach Alexandrien.—Beschreibung der im Auftrage Sr. Majestät des Königs von Preussen in den Jahren 1868- und 1869 Ausgeführten Reise. Bremen: 8vo, 2 vol. Maps, plates and photographs.

370. 1871. **Nachtigal, Dr.**—Ankunft in Kuka und die Uebergabe der Preussischen Geschenke an den Sultan von Bornu. Peterm. Geogr. Mitth. p. 67.

371. ——— Neueste Nachrichten von Dr. N. in Kuka (bis Januar 1871). Ethnographie von Wadai. l. c., p. 327.

372. ——— Notizen über Reise von Murzuk nach Kuka, 18 April bis 6 Juli 1870. l. c., p. 450.

373. ——— Briefe aus Nord-Central-Afrika. Zeitsch. der Ges. für Erdk. zu Berlin. 6 Bd. Heft. 8, pp. 130–150.

374. ——— Brief des Dr. —— aus Bornu. Das Ausl. Nr. 20, p. 475.

375. ——— Brief des Herrn Dr. —— an die Redaktion. Zeitsch. der Ges. für Erdk. zu Berlin. 6 Bd. 4 Heft. pp. 334–345.

376. ——— Uebersicht über die Geschichte Wadaï's. l. c., 6 Bd. 4 Heft, pp. 345–366.

377. 1871. **Drummond-Hay, Cons.-Gen. F. R.**—Report on the trade of Tripoli for 1869. Cons. Comm. Rep. pt. i. p. 295.

378. ——— do. for 1870. l. c., pt. ii. p. 1065.

379. ——— Report on the condition of the Industrial Classes in the Regency of Tripoli. Rep. from H.M. Diplom. and Cons. Officers, pp. 709.

380. 1871. **Henderson, Vice-Consul.**—Report on the trade of Bengazi for 1870–71. Cons. Comm. Rep. pt. ii. pp. 1068.

381. 1873. **Cosson, E.**—Descriptio plantarum novarum in Cyrenaico a G. Rohlfs detectarum. Paris: 8vo, pp. 11.

From Bull. de la Soc. botan. de France, Fév. 1872, t. xix. p. 80.

382. 1873. **Halévy, Jos.**—Les inscriptions libyques. Article in 'l'Athénée Oriental.' Paris, 1873.

383. 1873. **Beulé, M.**—Fouilles et découvertes, résumées et discutées en vue de l'histoire de l'art. Paris: 2 vol. 8vo, pp. 430–456.

Vol. ii. p. 59—Les Ruines de Cyrène. Chap. i. p. 64—Histoire de Cyrène —Ses Ruines. Chap. ii. p. 73—Les Temples de Bacchus et d'Apollon. Chap. iii. p. 80—Temples voisins du Stade; p. 90—Le Vase de Bérénice.

384. 1873. **Drummond-Hay, Con.-Gen. F. R.**—Report on the trade of Tripoli for 1871. Cons. Comm. Rep. pt. ii. p. 1328.

385. ——— Report on Tripoli. l. c., pt. iii. p. 657.

386. ——— Report on the trade of Tripoli for 1872. l. c. p. 1077.

387. 1873. **Henderson, Vice-Consul.**—Report on the trade of Bengazi for 1872. l. c. p. 1081.

388. 1873. **Protocol** signed by the Plenipotentiaries of Great Britain and Turkey, respecting Consular Jurisdiction in Tripoli. Hertslet's Treaties, vol. xiv. p. 540.

389. 1873. **Dournaux-Dupéré, Norbert.**—La rôle de la France dans l'Afrique Septentrionale et la Voyage à Timbouktou. Bull. Soc. Géogr. Paris, 6me sér. t. vi. p. 607.

The author gives a sketch of all that has been done for the exploration of the south, both in Algeria, Tripoli and Morocco; written as a preliminary study for his projected journey in the Sahara of Algeria, where he was killed in the following year.

390. 1874. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1872. Cons. Comm. Rep. part ii. p. 1077.

391. 1874. **Henderson, Vice-Consul.**—Report on the trade of Bengazi for 1872. l. c., p. 1080.

392. 1874. **Louis-Salvador, Archduke.**—Yacht-Reise in den Syrten. 1873. Prag: 4to, pp. 400, with map, 30 illustrations, and 34 woodcuts in text.

This, like all the distinguished author's numerous works, is got up magnificently, and is for private circulation only. His route lay from Alexandria along the North Coast of Africa to Tunis.

393. 1874. **Sevestre, H.**—D'Alger à Tripoli; mission de l'aviso le "Kléber," mai et juin 1874. Rev. Mar. et Colon, Dec., pp. 685–782.

The *Kléber* had to visit the coral fisheries and to "show the flag" in Tunis and Tripoli.

394. 1874. **Duveyrier, Henri.**—L'Afrique Necrologique. Bull. Soc. Géogr. Paris, 6me sér. t. viii. p. 560.

This gives a short account of all who have fallen victims to their endeavours to advance geographical knowledge in Africa, including, of course, the Barbary States. A very instructive map is added, showing the region in which each person travelled and the place of his death.

395. 1874. **Posthumus, N. W.**—Freule Tinne, de Nederlandsche reizigster door Afrika. With 2 maps. Tijdschrift van het Aardrijskundig Genootschap gevestigd te Amsterdam, No. 3, pp. 72–89.

Biography and travels of Madlle. A. Tinne.

396. 1874–75. **Rohlfs, Gérard.**—Zustände in Berberien, 2e Jahresbericht der Geographischen Gesellschaften. Hamburg.

397. 1875. **Drummond-Hay, Consul-Gen. Frank.**—Report on the trade of Tripoli for 1873. Cons. Comm. Rep., pt. i. p. 599.

398. 1875. **Henderson, Vice-Consul.**—Report on the trade of Bengazi for 1873. l. c., pt. ii. p. 907.

399. 1875. **Gay, Jean.**—Bibliographie des ouvrages relatifs à l'Afrique et à l'Arabie. Catalogue méthodique de tous les ouvrages français et des principaux en langues étrangères, traitant de la géographie, de l'histoire, du commerce, des lettres et des arts de l'Afrique et de l'Arabie. San Remo: 8vo, pp, 312.

This contains only a short list of books on Tripoli and the Cyrenaica.

400. 1875. **Fournel, Henri.**—Les Berbères. Étude sur la conquête de l'Algérie par les Arabes, d'après des textes arabes imprimées. Paris: 4to, t. i. pp. xii. and 609. The second vol. published in 1881, pp. iv. and 381.

The result of long and patient investigation.

401. 1875. **Largeau, V.**—Voyage à Ghadames. Bull. Soc. Géogr. Paris, p. 505, and Globe, t. xiv. pp. 95–119.

The author proceeded *viâ* Touggourt.

402. ——— Voyage dans le Sahara Central. Bull. Soc. Géogr. de Lyon, Jan. pp. 65–89.

403. ——— Le commeree du Sahara. L'Explorateur Géogr. et Comm., No. 19, p. 436 *et seq.*

404. ——— Spedizione nel Sahara Centrale. Cosmos, No. vi. p. 201 *et seq.*

405. 1875. **Rohlfs, Gerhard.**—Paul Soleillet's und Largeau's Reisen in die Sahara und nach dem Sudan. Peterm. Geogr. Mitth. p. 401.

406. 1875. **Mercier, Ernest.** — Histoire de l'Établissement des Arabes dans l'Afrique Septentrionale selon les documents fournis par les auteurs Arabes, et notamment par l'Histoire des Berbères d'ibn Khaldoun. Constantine: 8vo, pp. 406, with map.

407. 1875. **Perk, M. A.**—Zes jahren te Tripoli in Barbariye. Uit de gedenkschriften eener Nederlandsche Vrouw, door M. A. Perk. Amsterdam: 8vo.

The lady in question was wife of Clifford Kock van Brengel, Dutch Consul at Tripoli from 1827–33, who made an interesting archæological journey in the Cyrenaica.

408. 1876. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1874. Cons. Comm. Rep. pt. i. p. 843.

409. 1876. **Henderson, Vice-Cons.**—Report on the trade of Bengazi for 1874. l. c., p. 361.

410. 1876. **Italian Consular Report,** Tripoli. Cenni intorno al commercio, &c. Boll. Consol. pubblicate per cura del Ministero per gli Aff. Est. Torino, vol. xii. p. 219.

411. 1876. **Veth, Prof. P. J.,** and **Dr. C. M. Kars.**—Bibliografie van Nederlandsche Boeken, Brochures, Karten, enz. over Afrika. Utrecht: 8vo, pp. 98.

Pp. 18 to 29 are devoted to North Africa.

412. 1876. **Bainier, P.**—La Régence de Tripoli. Avec une Carte. L'Explorateur, No. 58, vol. iii. p. 202.

This is an extract from a work not then published, "Cours de Géographie Commerciale," by the author, who was "Sous-directeur de l'Ecole supérieure de Commerce de Marseille."

413. 1876. **Tripoli.** Article in Larousse, Grand. Dict. Univ. au XIX Siècle, t. xv. p. 514.

414. 1876. **Daveaux, J.**—Excursion à Malte et en Cyrénaïque. Paris: 8vo, pp. 8, from the Bull. de la Soc. bot. de France, t. xxiii. 14 Janv.

415. 1876. **Bary, Dr. Edwin von.**—Die Senan oder Megalitischen Denkmäler in Tripolis. Zeitsch. für Ethnologie, Leipzig, Bd. viii. 378–385.

Translated into French by Dr. F. Dargaud, under the title, "Les Senam et les Tumuli de la chaîne maritime de la Tripolitaine." Rev. d'Ethnographie, Paris, 1883, t. ii. p. 426–437, fig. 155.

416. ——— Voyage dans le Djebel Tripolitain. Explorateur, No. 75.

417. 1876. **Rohlfs, Gerhard.**—Largeau's zweite Expedition nach Rhadames und einige Worte über Algerien. Peterm. Geogr. Mitth. p. 250.

418. 1877. **Tauxier, L.**—Notice sur Corippus et sur la Johannide. Rev. Afr. vol. xx. p. 289.

The Johannide, a Latin poem by Flavius Cresconius, was written in the sixth century, and narrates the exploits of Johannes Troglita, an officer of Justinian, and one of the successors of Belisarius and Salomon in Africa.

419. 1877. **Bary, Dr. E. v.**—Reise in Nord-Afrika. Globus, Bd. xxxii. p. 5 *et seq.*

420. ——— Reisebriefe aus Nord-Africa. Zeitschr. Geo. f. Erdk. Berlin. Nos. 3 and 4, pp. 161–199.

421. 1877. **Mouchez, Admiral E.,** Director of the Observatory at Paris.—Explanation des Golfes des deux Syrtes entre Sfax et Benghasi. Comptes-rendues des séances de l'Acad. des Sc. t. lxxxiv. pp. 49-55.

422. ——— Exploration de la Grande Syrte. l. c., pp. 97–101.

423. 1877. **Barth, E. v.**—Largeau's erste Reise in Nord-Afrika. Das Ausland. No. 21, pp. 401–409.

424. 1877. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1875. Cons. Comm. Rep. pt. ii. p. 940.

425. 1877. **Henderson, Vice-Cons.**—Report on the trade of Bengazi for 1875. l. c., p. 1641.

426. 1877. **Firman** abolishing Slave Trade in Tripoli. Hertslet's Treaties, vol. xv. p. 831.

427. 1877. **The Mediterranean Pilot.**—Compiled from various sources. Published by order of the Lords Commissioners of the Admiralty. London: 8vo.

Vol. ii. pp. 215–255 contains a description of the N. Coast of Africa from Jerbah (Djerba) Island to El-Arish.

428. 1877. **Rae, Edward, F.R.G.S.**—The Country of the Moors. A Journey from Tripoli in Barbary to the City of Kairwan. London: 8vo, pp. 334, with map and 8 illustrations.

The author visited Tripoli and Lebda, going and returning by sea.

429. 1877. **Cyrenaica—Cyrene.** Articles in the Encyclopædia Britannica, 9th edition, vol. vi. p. 750.

430. 1877. **Bonola, Fredrico.**—I Viaggiatori Italiani nell'Africa. V. Viaggiatori Italiani in Berberia, nel Sahara; nel Bornù. Cosmos di Guido Cora, t. iv. p. 21.

431. 1877. **Beulé, M.**, Vase de Bengazi communiqué et expliqué par, — Mém. de l'Instit. Acad. des Inscr. et Bell. Lett. t. xxv. p. 41.

432. 1877. **Brunet de Presle, M.**—Observations sur le vase de Bengazi. l. c. p. 43.

433. 1877. **Beulé, M.**, Réponse de. l. c. p. 44.

434. 1877. **Nachtigal, Dr. G.**—Voyage au Wadai (Conférence faite à la Soc. de Géog. de Vienne). Bull. Trim. de la Soc. Khédiviale de Géogr. du Caire, No. 4, Dec. 1876–Avril 1877, pp. 305–350.

435. 1877. **Rohlfs, Gerhard.**—Eine Eisenbahn nach Central-Africa. Petermann, Geogr. Mitth., p. 45 *et seq.*, with map of the country S. of the Syrtis as far as Murzouk.

436. ——— Die Bedeutung Tripolitaniens an sich und als Ausgangspunkt für Entdeckungsreisende. Weimar: 8vo, map.

437. ——— Die Bedeutung Tripolitaniens an sich und als Ausgangspunkt für Entdeckungsreisende. Weimar: 8vo, pp. 21, with map.

The author maintains that Tripoli is the best place of departure for the Soudan.

438. 1877. **Playfair, Sir R. Lambert, K.C.M.G.**—Travels in the Footsteps of Bruce in Algeria and Tunis. London: 4to, pp. 300.

Pp. 275 to 294 contain an account of Bruce's Travels in Tripoli and the Cyrenaica, with facsimiles of his drawings of the quadrifrontal arch at Tripoli, and on the outer cover of the volume his drawing of the Doric Columns at Ptolemeta.

439. 1877. **Largeau, V.**—Voyage dans le Sahara et à Rhadames. Bull. Soc. Géogr. Paris, pp. 35–37. Le Globe, t. xvi. p. 205; L'Exploration, No. 41, p. 25 *et seq.*; Rev. Lyonnaise de Géogr., No. 1, p. 3.

440. 1877. **Féraud, L. Charles.**—Notes sur un voyage en Tunisie et en Tripolitaine. Rev. Afr. vol. xx. p. 490.

The last few lines only are devoted to Tripoli and Benghazi.

441. 1878. **Bossière, Gustave,** Inspecteur d'Académie.—Esquisse d'une Histoire de la Conquête et de l'Administration Romaines dans le Nord d'Afrique, et particulièrement dans la Province de Numidie. Paris: 8vo, pp. 436.

There is nothing very especial in this regarding the region east of Tunis, except incidentally as forming part of the Roman possessions.

442. 1878. **Rohlfs, Gerhard.**—Neues Afrikanisches Forschungs-Unternehmen. With map of country south of Tripoli and the Cyrenaica. Petermann, Geogr. Mitth. p. 20.

443. 1878. **Nachtigal, Dr. G.**—Von Tripolis nach Fezzân. With original map. Petermann, Geogr. Mitth. p. 45.

444. 1878. **Krause, G. A.**—Cronik von Fesan. Zeitsch. der Gesellschaft für Erdkunde z. Berlin, p. 356.

A mere repetition of Rohlfs, Petermann, Mitth. 1868, p. 1.

445. 1878. **Ayuso, D. F. G.**—Viaje de Rohlfs de Tripoli à Lagos. Madrid: 8vo, pp. 167. From 'Los descubrimientos Geográf. Modernos.'

446. ——— Voyage de Rohlfs de Tripoli à Lagos. Paris: 8vo. pp. 61.

447. 1878. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1876. Cons. Comm. Rep. pt. ii. p. 932.

448. 1878. **Henderson, Vice-Cons.**—Report on the trade of Bengazi for 1876. l. c., p. 930.

449. 1879. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1877. Cons. Comm. Rep. pt. ii. p. 788.

This gives an account of the esparto trade.

450. 1879. **Rohlfs, Gerhard.**—Notices of his expedition. Petermann, Geogr. Mitth. p. 72 *et seq.* Cosmos di Guido Cora, vol. v. p. 114 *et seq.*

451. ——— Reise nach Kufra. Mitth. d. Afrik. Ges. No. 4, p. 12 *et seq.*

452. ——— Zur Charakteristik der Sahara. Zeitschr. f. Erdk. No. 5, p. 368

453. ——— Die Oase Djofra im Jahre 1879. Westermann's Monatsb. iii. n. 13, p. 80. Also L'Explor, p. 376.

454. ——— Cyrenaïka oder Barka. Geogr. Rundschau, i. n. 12, p. 614.

455. 1879. **Nachtigal, Dr. Gustav.**—Sahara und Sudan. Ergebnisse sechsjähriger Reisen in Afrika. Berlin: 2 vol. 8vo, pp. 748, 790. With numerous illustrations and maps. A most valuable work. The author started from Tripoli, travelling south to Lake Tschad.

Also a French translation by Jules Gourdault. Paris: 8vo, pp. 540, with map and 99 illustrations.

And an Italian one in the Cosmos di Guido Cora, vol. v. p. 411 *et seq.*

The first nine chapters are devoted to Tripoli and Fezzan.

456. 1879. **Golf von Sidra,** Beschreibung von Untiefer im — Tripolis. Ann. d'Hydrogr. No. 4, p. 181.

457. 1879. **Chavanne, Dr. Josef.**—Die Sahara, oder von Oase zu Oase. Wien: 8vo, pp. 639. With map and many illustrations.

I. Von Tripoli nach Murzuk.
II. Fessan.
III. Von Murzuk nach Rhat.
IV. Von Rhat nach Rhadames, &c.

458. 1879. **Gorringe, Lt.-Commander Henry H.,** and **Lieut. Seaton Schroeder, U.S. Navy.**—Coasts and Islands of the Mediterranean Sea. Bureau of Navigation, Hydrographic Office, Washington: 8vo.

Part iii. pp. 219 to 281 contains a description of the Tripolitan coast as far as the frontiers of Egypt. Two plates, containing sketches of coasts and headlands.

459. 1879. **Paladini, Leone.**—La ferrovia del Sahara, fra Cabes e il Sudan, e sua evidente correlazione cogli interessi commerciali d'Italia. Cagliari: 8vo, pp. 64.

460. 1880. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1878. Cons. Comm. Rep. pt. i. p. 600.

461. 1880. **Dupuis, Consul.**—Report on the trade of Bengazi for 1878. l. c., p. 595.

462. 1880. **Jones, Consul.**—Report on the trade of Tripoli, for the quarter ending 30th June, 1880. Reports from the Consuls of the United States, No. 2, p. 2.

463. 1880. **Italian Consular Report** on Tripoli for 1880. Boll. Consolare, pubblicato per cura del Ministero per gli affari Esteri, Roma, vol. xvii. p. 789.

464. 1880. **Puchstein, O.**—Zur Arkesilasschule. Archäol. Zeit. Berlin, 1880, p. 185. On the subject of Cyrenian pottery.

465. 1880. **Bary, E. v.**—Tagebuch, geführt auf seiner Reise von Tripolis nach Ghat und Aïr. Zeitschr. Ges. f. Erdk. Berlin, No. 1.

466. 1880. **Camperio.**—Gita nella Tripolitania. Esplor. vol. ix.—See also Un Viaggio a Tripoli.

467. 1880. **Rohlfs, Gerhard.**—Importanza della Tripolitania per sè stessa e come punto di partenza per gli esploratori. Versione del cap. dott. C. dall'Acqua. L'Esploratore, Giornali di Viaggi e Geografia Commerciale, Milano, anno iv. pp. 387–394.

468. 1880. **Rossoni,** Agente Consolare d'Italia.—La Pesca delle spugne sulle coste di Barberia. Bengasi. l. c. p. 395.

Followed by tables of trade and navigation of Tripoli for 1879.

469. ——— Handel und Colonien in Nord-Afrika. Export, No. 22.

470. ——— Neue Beiträge zur Entdeckungund Erforschung Afrika. Cassel: 8vo, pp. 159. This specially refers to N. Africa.

471. 1880. **Pasqua, Dr.,** Médecin en Chef de l'Hôpital Militaire de Benghazi. Le Docteur Gerhard Rohlfs et l'expédition allemande en Afrique (1879). Rev. de Géogr. Paris, t. vii. p. 215.

Dr. Rohlfs conveyed presents from the Emperor of Germany to the Sultan of Wadaï in return for the hospitality of the latter to Dr. Nachtigal. He was accompagnied by a naturalist, Dr. A. Stecker.

472. 1881. **Rohlfs, Gerhard.**—Kufra. Reise von Tripolis nach der Oase Kufra, ausgeführt im Auftrage der Afrikanischen Gesellschaft in Deutschland von G. R. Nebst, Beiträgen von P. Ascherson, J. Hann, F. Karsch, W. Peters, A. Stecker. Mit 11 Abbildungen und 3 Karten. Leipzig: 8vo. pp. viii. 559.

Also an Italian translation: Tripolitania, viaggio da Tripoli all'oasi Kufra, by Dr. Guido Cora. Milano: 8vo, pp. 200.

A second part of the work is devoted to scientific subjects, in which he is aided by several distinguished naturalists.

Reviewed in the Rev. des Deux Mondes, by **G. Valbert,** 1st Nov. 1881, under the title "Un voyage malheureux dans les Oasis de la Tripolitaine."

473. ——— Neue Beiträge zur Entdeckung und Erforschung Africa's. Cassel: 8vo, pp. 156.

Notes on various subjects; *inter alia* on Halfa grass, and the importance of Tripoli in the problem of opening out Africa.

474. 1881. **Ascherson, P.**—Florula der Oasengruppe Kufra nach den Beobachtungen und Sammlungen von G. Rohlfs. Sitzungsber d. Botan. Vereins d. Prov. Brandenburg, xxiii.—See also Rohlf's Kufra (1881).

475. 1881. **Kraus, Dr.**—Dell'Oasi et Città di Ghat. L'Esploratore, An. v. p. 73 *et seq.* with plan.

476. 1881. **Bottiglia, Cap. G.**—Rapporto da Bengasi. l. c., p. 104.
Followed by statistics of commerce in Tripoli during 1880.

477. 1881. **Camperio, Cap. M.**—Una Gita in Cirenaica. l. c., p. 257 *et seq.* with map.

478. 1881. **Mamoli, P.**—Atti e Notizie Bengazi-Derna. l. c., pp. 277–406.

479. 1881. **Puchstein, O.**—Kyrenaeische Vasen. Archäol. Zeit. Berlin, 1881, p. 317, pl. 10–13.

An article intended to prove that a certain class of vases, of which the Arkesilaos vase of Paris is a well-known example, were manufactured in the 6th century. For engraving of that vase see title-page Birch's Ancient Pottery, 1873.

480. 1881. **Gorringe, H. H.**—A Cruise along the Northern Coast of Africa. Bull. Amer. Geogr. Soc. No. 2, pp. 47–58.

481. 1881. **Bisson, Léon de.**—La Tripolitaine et la Tunisie, avec les renseignements indispensables au voyageur. Paris: 8vo, pp. 147.

A very superficial work.

482. 1881. **Perrond, Cl.**—De Syrticis emporiis, thesim facultate litterarum parisiensi proponebat ad doctoris gradum promovendus Cl. P——. Parisiis: 8vo., pp. 226.

To this is joined, Index operum in hac commendatione laudatorum—about 109 entries.

483. 1881. **Cherbonneau, A.**—Ghadames et le Commerce Soudanien. Rev. de Géogr. Juin.

484. 1881. **Richard, P. L.,** Missionnaire.—Carte du Sahara Tripolitain pour servir à l'intelligence d'un voyage chez les Touaregs Azghers. Les Missions Catholiques. Lyon: t. 13. No text.

485. 1881. **Consular Report (Italian)** on Tripoli. Boll. Consol. xviii. p. 3.

486. 1881. **Skippen, E.,** Medical Director, U.S. Navy.—A forgotten General. The United Service; a monthly review of military and naval affairs, Philadelphia, vol. v. No. 1, p. 1.

Gives an account of the filibustering expedition of William Eaton, the well-known American "General" in the Cyrenaica. He was named U.S. Consul at Tunis. After a short and troubled residence there he proceeded to Egypt, whence he marched with an ill-assorted and mutinous force to Derna, which he took, though he was speedily obliged to evacuate it.

487. 1881. **Wilmanns, Gustavus.**—Inscriptiones Africae Latinae consilio et auctoritate Academiae Litterarum Regiae Borussiae. Collegit G. W. Berolini: 2 vol. folio.

Part 1, pp. 1–9 contains inscriptions collected in the Province of Tripoli.

488. 1881. **Brunialti, Dr. Attilio.**—Algeria, Tunisia e Tripolitania, studio di geografia politica sugli ultimi avvenimenti africani. Milano: 12mo, pp. 274, map.

Reviewed in the Bull. Corres. Afr. 1884, p. 147.

The author seeks to turn the eyes of his countrymen to this country, which he believes destined to become a new Italy.

489. 1881. **Bottiglia, Capt.**—Lettera da Bengasi. L'Esploratore, No. 8, pp. 277–280.

490. 1881. **Haimann, Comm.,** and **S. Pastore.**—Da Bengasi a Derna. L' Esploratore, No. 7, pp. 251–253.

Haimann's work was published separately at Milan in 1886. q. v.

491. 1881. **Mamoli, P.**—La Cirenaica. L' Esploratore, No. 7, pp. 241–251.

492. ——— Lettere da Derna. l. c., No. 8, pp. 280–288.

493. 1881. **Reisen in Cyrenaica.**—Im Auftrage der Handels-Erforschungsgesellschaft von Mailand ausgeführt von Capitän Camperio und Dr. Mamoli, Commendatore Haimann und Herrn Pastore. Petermann, Geogr. Mitth. pp. 321, with map of the Cyrenaica.

494. 1881. **Drummond-Hay, Cons.-Gen. F. R.**—Report on the trade of Tripoli for 1880. Cons. Comm. Rep. pt. i. p. 373.

495. ——— Report on the trade of Tripoli for 1879. l. c., pt. i. p. 993.

496. 1881. **Dupuis, Consul.**—Report on the trade of Bengazi for 1879. l. c., p. 1601.

497. 1882. **Playfair, Sir R. Lambert, K.C.M.G.**—Handbook (Murray's) to the Mediterranean, its cities, coasts and islands. London: 8vo.

Pp. 43 to 49 contain an account of the Coast of Tripoli and the Cyrenaica.

498. 1882. **Broadley, A. M.**—The last Punic War—Tunis past and present, with a narrative of the French Conquest of the Regency. London: 2 vol. 8vo. pp. 356, 398, with illustrations.

Chap. xl. vol. ii. p. 219 contains a description of "Tripoly in the West" and of the Confraternity of *Es-Senoussi.*

499. 1882. **Drude, Dr. Oscar.**—Die floristische Erforschung Nord-Afrika's von Marokko bis Barka. Petermann, Geogr. Mitth. pp. 143–150.

At the end of this article is a short notice of the flora of Tripoli and Barca.

500. 1882. **Ascherson, P.,** Professor at Berlin.—Note Botaniche intorno ad alcune piante dell' Africa Boreale alta alla concia delle pelli. L' Esploratore, an. vi. p. 358.

501. 1882. **Camperio, Capit.**—Notizie Statistiche su Barca (Cirenaica). Da una Relazione del Capitano Camperio pubblicata dalla Mittheilungen dì Gotha (1881). l. c., p. 366.

502. 1882. **Mamoli, P.**—Stazione di Derna, della Soc. d' Esplor. Comm. in Africa, Rapporto No. 35 del delegato P. Mamoli. l. c., p. 367.

503. 1882. **N. N.**—A Proposito della Tripolitania. l. c., p. 397.

504. 1882. **Fontpertuis, Ad. F. de.**—Géographie. La Tripolitaine, le Fezzan et le Tibesté. Rev. Scient. Paris, 3me sér. t. iii. p. 775.

505. 1882. **Mamoli.**—Stazioni di Derna (Cirenaica). Cenni storici e geografici L'Esploratore, an. vi. p. 68.

506. 1882. **Bottiglia, G.**—Relazione sull' importazione ed esportazione di Bengase, anno 1881. l. c., p. 70.

507. 1882. **Bettoli, Parmenio.**—Tripoli Artistica. l. c., Fasc. iii. *et seq.*

In the same number is a map of the territory of Bengazi.

508. ——— Tripoli Commerciale. l. c., pp. 265 *et seq.*

509. 1882. **Mamoli, P.**—Stazione di Derna. Gita alle fonti. l. c., pp. 196 and 324.

510. ——— L' incidente di Derna l. c., p. 218. The arrest of Sig. Mamoli, agent of the Società d'Esplorazione at Ras-et-Tin, near Derna.

511. 1882. **Haimann, G.**—Cirenaica, con disegni dell' autore. Boll. Soc. Geogr. Ital. vii. No. 1, p. 6.—See also L' Esploratore, An. vi. p. 306.

Haimann and Camperio made a journey in the Cyrenaica, accompanied by the wife of the former and a numerous escort.

512. 1882. **Schweiger-Lerchenfeld, A. von.**—Der Orient. Wien: 8vo, pp. cxlii. 808.

Copiously illustrated. P. 793 to the end devoted to Tripoli and Tunis.

513. 1882. **Tripoli—Prezzi correnti** delle merci. Boll. Consol. vol. xviii. p. 586.

514. ——— Another short notice. l. c., p. 322.

515. ——— Movimento della navigazione. l. c., vol. xix. p. 252.

516. 1882. **Rohlfs, G.**—Die Kufra-Oase. Westermann's Monatshefte, l. l., N. 306, pp. 785–795.

517. ——— Liegt ein Grund vor, die Städtebevölkerung von Marokko, Algerien, Tunisien und Tripolitanien als eine besondere zu betrachten und zu benennen? Ausland: N. 16, pp. 301–307.

518. 1882. **Bettoli, P.**—Tripoli commerciale. L' Esploratore, vi. No. 7, pp. 265–273. With map.

518A. 1882. **Paulitschke, Dr. Philippe.**—Die Afrika-Literatur in der Zeit von 1500 bis 1750, N. Ch. Ein Beitrag zur geographischen Quellenkunde. Gelegentlich des ii. Deutschen Geographentages zu Halle a/S.

Wien: 8vo. pp. 122.

Of the 1212 works here catalogued, 450 have reference to Egypt and North Africa.

518B. 1882. **Splaine, J. F.**—Four days in Tripoli. "The Month": vol. xliv. p. 91, January, 1882. See also Liv. Age. vol. clii. p. 312.

519. 1883. **Charmes, Gabriel.**—La Tunisie et la Tripolitaine. Paris: 8vo, pp. 443, 2nd Ed. in 1884.

This work is a reproduction of letters which appeared in the *Journal des Débats* in July and Aug. 1882. The author visited Tripoli during the Insurrection in Egypt, when great agitation existed in the West.

520. 1883. **Duveyrier, Henri.**—Tremblement de terre à Ghalames. Compte Rend. Soc. Géogr. Paris, p. 454.

521. 1883. **Feraud, L. Charles.**—Annales Tripolitaines. Lettre de M. F., Consul-Général de France à Tripoli, à M. de Grammont, Président de la Soc. hist. Alg. Rev. Afr. vol. xxvii. p. 207.

The author gives a short account of Tripoli from 1146, when Roger, King of Sicily, took possession of it, and he appends a list of the various French consuls from 1630. He promises a more complete work afterwards. M. Feraud died at Tangier while these sheets were in the press.

522. 1883. **Rizetto, R.**—Attached to the Ministry of Foreign Affairs. La Tripolitania quale risulta dai viaggi di G. Rohlfs. Roma: pp. 128.

Reviewed by F. C. in the 'Nuova Antologia' of 15th Jan. This work cites the opinion of Rohlfs, that Italy should conquer the Cyrenaica.

523. 1883. **Rizetto, R.**—I commerci di Tripoli e quelli del Sudan. Roma: 8vo, pp. 118.

Estratto dai Giornale Il Diritto.

524. 1883. **Rohlfs, Gerhard.**—Die Anzahl der Juden in Afrika. Petermann, Geogr. Mitth. p. 211.

Brunialti's estimate of 100,000 Jews in Tripoli is quoted and disproved.

525. 1883. **Lemay, G.**—La Tripolitaine et le Grand Désert. Bull. de la Soc. de Géogr. Comm. t. v. pp. 352–369.

The substance of an address given before the society, based on a residence of several months in the country. The author particularly describes Tripoli and its commerce.

526. 1883. **Cyclop.**—Aus den Beiseberichten S. M. S———, Kapt. Lieut. **Kelch.** Bemerkungen über die Bucht von Tobruk, Nordküste von Afrika. Annalen d. Hydrogr. xi. N. 7, pp. 403–405.

527. 1883. **Schweinfurth, Dr. G.**—La Côte de la Marmarique. Lettre à M. Henri Duveyrier. Compte Rend. Soc. Géog. Paris, p. 484.

The author made a voyage on board a German gunboat to the port of Tobruck. He remarks that he is proud of being the first to call the attention of the Italians to the Cyrenaica and the Tripolitaine.

528. ——— Una Visita al Porto di Tobruc (Cirenaica). L'Esplor. vii. p. 207. With a plan.

529. 1883. **Mamoli, P.**—Stazione di Derna (Cirenaica). Rapporto 39 del delegato P. M. L'Esploratore, an. vii. p. 29.

530. ——— Rapporto 40. l. c., p. 100.

531. ——— Relazione Agricolo-Commerciale. Report on the operations of the Soc. d'Esplor. Comm. in Africa, especially regarding commerce and colonisation in the Cyrenaica. l. c. vii. p. 193.

532. ——— Rapporto 41. Tobruk. l. c., p. 163.

533. 1883. **Freund, Dr. G. A.**—Viaggio lungo la gran Sirte da Bengasi a Tripoli, Maggio e Giugno, 1881. l. c., pp. 183 *et seq.*

534. 1883. **Corbetta, Dr. C.**—Da Tripoli ad Algeri. l. c., p. 265.

535. 1883. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1881. Cons. Comm. Rep. pt. i. p. 241.

536. 1883. **Italian Consular Report.**—Tripoli. Quadro della Navigazione. Boll. Consol. vol. xx. p. 321.

537. 1884. **Waille, Victor.**—Bibliographie des ouvrages concernant la Cyrénaïque et la Tripolitaine. Alger Bull. Corresp. Afr. p. 227.

The author quotes 127 works on these countries.

538. ——— Recents Travaux Italiens sur la Cyrénaïque. l. c., p. 146.

539. 1884. **Lanier, L.**—L'Afrique. Choix de lectures de Géographie, accompagnées de résumés, d'analyses, de notes explicatives et bibliographiques, et ornées de 57 vignettes, de 9 cartes tirées en couleur et de 33 cartes dans le texte. Paris: 12mo, pp. 920.

Livre ii. p. 345, Région Tripolitaine et Saharienne. At p. 362 is a short bibliography.

540. 1884. **Tissot, Charles,** Ambassador.—Exploration Scientifique de la Tunisie. Géographie Comparée de la Province Romaine d'Afrique. Paris: vol. i. 4to, pp. 697.

At p. 210 is a hydrographical description of the coast of Tripoli.

541. 1884. **Duveyrier, H.**—La Confrérie musulmane de Sidi Mohammed ben 'Ali Es-Senousi et son domaine géographique en l'année 1300 de l'Hegire (1883 de notre ère). Paris: 8vo, pp. 84, with map. From Bull. Soc. de Géogr. Paris, 7e sér. t. v. pp. 145–226.

542. 1884. **Buonfanti.**—Reise von Tripolis nach Lagos. Peterm. Geogr. Mitth. pp. 272, 314.

543. ——— Le Sahara et le Soudan occidental. Bull. Soc. R. Géogr. Bruxelles, viii. Nos. 1 and 2, with map.

544. 1884. **Camperio, Capt.**—Carta economica della Tripolitania e Cirenaica.

This map has been published by the Soc. d' Esplorazione Comm. in Africa, Milano—scale, 1 : 3500,000—and includes all the recent observations of Captain Camperio and his companion, Sr. Mamoli.—See L' Esploratore, an. viii. p. 64.

545. 1884. **Longo, il Pastore P.**—Lo Snussiomo, ovvero la confraternità Mussulmana di Sidi Mohammed Ben Ali es-Snussi. l. c., p. 121 *et seq.*

546. 1884. **Brunialti, Prof. A.**—Assab e Tripoli. l. c., p. 257.

547. 1884. **Garcin, L.**—Tripoli. Corrispondenza commerciale. l. c., p. 326.

548. 1884. **Schweiger-Lerchenfeld, A. von.**—La Tripolitaine et l'Egypte d'après l'ouvrage allemand de.....par F. Kohn-Abrest. Paris: 8vo, pp. 187, with illustrations.

549. 1884. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1882. Cons. Comm. Rep. pt. i. p. 211.

550. 1885. **Melon, Paul.**—De Palerme à Tunis, par Malte, Tripoli et la Côte. Paris: 8vo, pp. 212, 8 illustrations.

This is a mere record of a tourist's impressions. The author states in his preface:—"Ceci n'est pas un livre à proprement parler."

551. 1885. **Piesse, L.**—De la Goulette à Tripoli. Bull. Trim. de Géogr. (Oran) t. v. pp. 8 to 16, 5 illust.

The author simply made the voyage in the mail steamer.

552. 1885. **Longo, Pastore P.**—Delle Antiche Città della Tripolitania. L' Esploratore, an. ix. p. 109.

An attempt to fix the position of the ancient cities after Vivien de St. Martin.

553. 1885. **Camperio, Capt.,** and **Dr. Schweinfurth.**—Sudan, Egitto e Tripolitania. l. c., p. 169.

554. 1885. **Brunialti, Prof. A.**—Andiamo a Tripoli? l. c., p. 210.

Extracted from the author's work, 'L' Italia e la questione coloniale,' Milano, 1885. This gives a succinct account of the Tripolitaine and the Cyrenaica, and the benefits likely to result to Italy from the possession of these countries.

555. 1885. **La Tratta degli Schiavi** in Tripolitania. l. c., p. 256.

556. 1885. **Lupi.** La Tripolitania. Rome.

A work of no particular scientific merit, but intended to make known the country in Italy, and to advocate its occupation by that nation.

557. 1885. **La Cirenaica (Tripolitania).**

The anonymous author reviews the work of Giuseppe Haimann (2nd ed. with plans of Bengazi and Derna), and suggests that the Italian Government should assist the Milanese Society in exploring the country. Nuova Antologia, 1st November.

557A. 1885. **Elisyeër, A. V.**—Anthropological Expedition into the Sahara through Tripoli, Tunis and Algiers (Russian).

Izvyestiya Imperatorskova Russkova Geographicheskovo obschestva. St. Petersburg. T. xxi. No. 4.

558. 1885. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1883. Cons. Comm. Rep. pt. i. p. 360.

559. 1885. **Wood, Consul.**—Report on trade of Bengazi for 1883. l. c., p. 1389.

560. 1886. **Reclus, Élisée.**—Nouvelle Géographie Universelle; La Terre et les Hommes. T. xi.—L'Afrique Septentrionale: Tripolitaine, Tunisie, Algérie Maroc, Sahara. Paris, 8vo, pp. 912, 4 coloured maps, 160 maps in the text, and 83 woodcuts.

A work of the highest value. The portion devoted to Tripoli and the Cyrenaica is from p. 1 to 133.

561. 1886. **Estournelles de Constant, P. d'.**—Les Sociétés secrètes chez les Arabes et la conquête de l'Afrique du Nord. Rev. des Deux Mondes, March, t. lxxiv. p. 100.

Gives an account of the order of Es-Senoussi in the Cyrenaica.

562. 1886. **Mas-Latrie, le Comte de.**—Relations et Commerce de l'Afrique Septentrionale ou Magreb, avec les Nations Chrétiennes au moyen âge. Paris: 12mo, pp. 550.

Pp. 384–389 especially devoted to Genoese relations with Tripoli in 1355.

563. ——— Anciens Évêchés de l'Afrique Septentrionale. Bull. Corresp. Afr. 5e year, p. 80.

This is a re-arrangement of the sees given by Morcelli, in geographical order. Eight are mentioned as in the Tripolitaine.

564. 1886. **Rohlfs, Gerhard.**—Quid novi ex Africa? Cassel: 8vo, pp. vii. 288.

A series of detached papers, one of which is, "Is there any reason for believing that the town population of Morocco, Algeria, Tunis and Tripoli are of a special character?"

565. 1886. **Haimann, Comdt. Giuseppe.**—Cirenaica (Tripolitania). Milano: 8vo, pp. 215, copiously illustrated, also map of the Cyrenaica and plans of Bengazi and Derna.

The author died at Alexandria (1883) before the publication of this work.—See also Peterm. Geogr. Mitth. p. 186.

566. 1886. **Esplorazione Commerciale.**—At the end of 1885 the "Esploratore" was replaced by the above-named journal as the official organ of the "Società d'Esplorazione Commerciale in Africa, Residente in Milano." Frequent letters containing commercial and political information regarding Tripoli and the Cyrenaica continue to appear in it.

567. 1886. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1884. Cons. Comm. Rep. pt. i. p. 481.

568. 1887. **Gürich, Dr.**—Ueberblick über den geologischen Bau des Afrikanischen Kontinents. Mit Karte, s Tafel 13. Peterm. Geogr. Mitth. p. 257.

569. 1887. **Fournel, Marc.**—La Tripolitaine, les Routes du Soudan. Paris: 8vo, pp. 272.

Contains much useful information regarding the country, its people, climate and productions.

570. 1887. **Head, Barclay V.**, Assistant Keeper of Coins, Brit. Mus.—Historia Numiarum: a manual of numismatics. Oxford: 8vo, pp. 784.

At page 725 is an account of the coins of the Cyrenaïca, Libya and Syrtica.

571. 1887. **Drummond-Hay, Cons.-Gen. Frank.**—Report on the trade of Tripoli for 1886. Cons. Rep. New Series, No. 89.

572. 1888. **Broadley, A. M.**—Tripoli: article in Enc. Brit., vol. xxiii. p. 574.

573. 1888. **Testa, Jhr. F.**—Waarm. Consul-Generaal le Tripoli. Verslag over 1887. Verz ameling van Consulaire, &c. Jaargang, 1888, p. 588.

574. 1888. **Mauprix, Ch. de.**—Les Italiens à Tripoli. Art. in Le Correspondant, Oct. 10, 1888.

575. 1888. **Les Allemands à Tripoli.**—Rev. Franç. de l'Étr. et des Colon. t. vii. p. 585.

576. 1888. **Tripolitaine.**—Situation économique. l. c., t. viii. p. 165.

577. 1888. **Tripoli**, Commerce. l. c., p. 283.

578. 1888. **Borsari Ferdinando.**—Geografia, Etnologica e Storica della Tripolitania, Cirenaica e Fezzan, con Cenni sulla Storia di queste Regioni e sul Silfio della Cirènaica. Torino; Napoli; Palermo: 8vo, pp. 278.

This is divided into four parts, each preceded by a short bibliography: i. Geografia Etnologica, pp. 9–66; ii. Geografia Storica, pp. 67–214; iii. Cenni sulla Storia della Tripolitania e Cirenaica, pp. 215–268; iv. Il Silfio della Cirenaica, pp. 269–279.

579. 1889. **Marbeau, Edouard.**—L'Italie dans l'Afrique du Nord. l. c., t. ix. p. 129, with map.

This contains views favourable to the annexation of Tripoli and the Cyrenaica by Italy. "Nous croyons que la cause de la Civilisation et de la liberté ne ferait que gagner si la France et l'Italie poursuivraient . . . &c."

PUBLIC RECORDS.—TRIPOLI ARCHIVES.

In the Public Record Office in London there is a series of 62 MS. volumes containing correspondence from and to the Consulate-General of Tripoli, as follows:—

Royal Letters, 1590–1742. This volume contains letters and translations from the Beys of Tripoli and Tunis to the Sovereigns of England.

No. 1. 1590–1728. Letters from Consuls Samuel Tooker, Nathaniel Bradley, Admiral Sir John Narborough, Consuls Thomas Baker and Nathaniel Lodington.

At the beginning of the vol. is a very curious view of Tripoli (about 1560) being attacked by the Army "del Re Philippo et con aiuto della Sede Apostolica, del Duca de Fiorenza et del gran Mastro della Religion di Rhoda." It also contains printed copies of Sir John Narborough's treaty of 5th March 1675–6.

No. 2. 1659 to Geo. II. An unbound collection of miscellaneous letters.

No. 3. 1729–1746. Letters from Consuls Nathaniel Lodington and William Reed.

No. 4. A single Turkish letter sealed Mohammed ben Othman [A.H.] 1169.

No. 5. 1747–1766. Letters from Consuls William Reed and Robert White.

No. 5 [*sic*]. 1756–1765. Letters from Consul Robert White and several from the Bey to the King.

No. 6. 1765–1769. Letters from Consuls A. Fraser, Robert Wilkie and Edward Barker.

No. 7. 1770–1779. Letters from Consuls Barker, Bayntun, Cooke, Mr. (afterwards Consul) Tully and others. An unbound collection.

No. 8. 1780–1792. Letters from Consuls Richard Tully and George Burgall.

No. 9. 1793–1804. Letters from Consuls Richard Tully and Simon Lucas, Pro-Consul B. McDonogh and Consul William Wass Langford.

No. 10. 1805–1809. Letters from Consul William Wass Langford.

No. 11. 1810–11. Ditto.

No. 12. 1812–13. Ditto, and from Pro-Cons. Pat. Wilkie and James Somerville.

No. 13. 1814–15. Letters from Cons.-Gen. Colonel Hanmer Warrington.

No. 14. 1816. Ditto.

No. 15. 1817. Ditto.

No. 16. 1818. Ditto.

No. 17. 1819. Ditto. This contains news of Mr. Ritchie's expedition, and letters from him.

No. 18. 1820. Cons.-Gen. Warrington. This contains a coloured sketch of his house, and pencil sketches of antiquities found by him.

No. 19. 1821. Cons.-Gen. Warrington. The first despatch reports transmission of thirty cases of antiquities.

No. 20. 1822. Cons.-Gen. Warrington. Contains a historical memoir on Tripoli, and letters from, and information regarding Dr. Oudney, Capt. Beechey and Mr. A'Court.

No. 21. 1823. Cons.-Gen. Warrington. News of, and letters from Clapperton, Denham and Oudney.

No. 22. 1824. Cons.-Gen. Warrington. Letters from Denham and Toole.

No. 23. 1825. Cons.-Gen. Warrington. Further news of the above travellers, also of Major Laing. An account of Tyrwhitt's death at Bornou.

No. 24. 1825. Cons.-Gen. Warrington. News from Clapperton, Denham and Laing. Antiquities and Greek inscriptions from Cyrene.

No. 25. 1827. Cons.-Gen. Warrington, and Vice-Cons. Dupuis.

No. 26. 1827. Ditto. Letters concerning Major Laing's mission.

No. 27. 1828. Cons.-Gen. Warrington. Consular Diary. News from Clapperton and Denham's mission. Murder of Major Laing.

No. 28. 1828. Cons.-Gen. Warrington. Trade Reports.

No. 29. 1829. Cons.-Gen. Warrington and Vice-Cons. Dupuis. Trade Returns.

No. 30. 1829. Cons.-Gen. Warrington. Letters regarding Major Laing's papers, and Miscellaneous.

No. 31. 1830. Cons.-Gen. Warrington and Vice-Cons. J. Fraser. Consular Diary. French treaty with Tripoli. British convention. Information regarding the murder of Major Laing, and death of Mrs. Laing.

No. 32. 1830. Cons.-Gen. Warrington and Vice-Cons. J. Fraser. Commission to enquire into the charge against French Consul-General for having fraudulently obtained the papers of Major Laing. French expedition under Adm. Rosamel to Tripoli.

No. 32A. 1675–1818. Treaties with Tripoli. Copies made by Cons.-Gen. Warrington.

No. 32B. 1695–1830. Copies of Treaties.

No. 33. 1831. Cons.-Gen. Warrington and Vice-Cons. Fraser. Consular Diary. Letter of Gräberg da Hemsö regarding missing copy of Ibn Batuta.

No. 34. 1831. Cons.-Gen. Warrington. Miscellaneous and Trade returns.

No. 35. 1832. Cons.-Gen. Warrington. Consular Diary of Bengazi. Miscellaneous. Trade returns.

No. 36. 1832. Ditto. Miscellaneous.

No. 37. 1832. Regarding the charge made by the Pasha of Tripoli against Sidi Hassuna D'Ghies of having abstracted the papers of the late Major Laing.

No. 38. 1833. Cons.-Gen. Warrington. Miscellaneous.

[No. 39. Missing.]

No. 40. 1833. Vice-Cons. J. Fraser and Joseph Dupuis. Continuation of the affair of Hassuna D'Ghies and the late Major Laing.

No. 41. 1834. Cons.-Gen. Warrington. Miscellaneous.

No. 42. 1835. Cons.-Gen. Warrington. Miscellaneous.

No. 43. 1835. Cons.-Gen. Warrington. Miscellaneous.

No. 1. 1825–32. Letters to Cons.-Gen. Warrington from Colonial Office.

No. 2. 1832–36. Ditto.

No. 3. 1825–34. Domestic. Answers to letters.

No. 4. 1834–36. Ditto. Ditto.

No. 1. Jan. to Sep., 1836. Letters from Cons.-Gen. Warrington. Diplomatic and Consular.

No. 2. Oct.–Dec., 1836. Ditto. Ditto.

No. 3. 1836. Vice-Cons. Wood, Bengazi and Vice-Cons. Dupuis. Report from the latter on trade of interior, with map.

No. 4. 1837. Cons.-Gen. Warrington and Vice-Cons. Wood, Bengazi.

No. 5. Cons.-Gen. Warrington. Various.

No. 6. Cons.-Gen. Warrington and Vice-Cons. Wood.

No. 7. 1839. Cons.-Gen. Warrington. Various.

No. 8. 1840. Cons.-Gen. Warrington and Vice-Cons. Wood, Bengazi.

No. 9. 1841. Ditto, ditto.

No. 10. 1824–41. Case of Captain Chatten, "La Fortuna."

No. 11. 1842. Cons.-Gen. Warrington.

No. 12. 1842. Ditto. Vice-Cons. Wood, Bengazi.

There are also scattered notices concerning Tripoli, some of great historical interest, in the various printed calendars of State papers published under the direction of the Master of the Rolls, as follows:—

Spanish Series, vol. 1509–1525, pp. 276, 583.

Venetian Series, vol. 1520–1526, No. 796–799.

Foreign and Domestic Series, Henry VIII., vol. i. 1509–1511, No. 1209, and vol. ix. 1535, No. 910.

Foreign Series, Edw. VI., 1547–1553, pp. 157, 162, 163, 165, 168, 170, 172, 175, 183.

Calendar of Treasury Papers, vol. 1556–7–1696, No. 392, 464, 483–542; vol. 1697–1701–2, xlvii. 30, li. 54, lxi. 1, lxv. 9, lxxvii. 36, 57; vol. 1702–1707, lxxxiv. 33, 34, 90, lxxxv. 125, lxxxvi. 19, 100; vol. 1708–1714, cxxxiii. 9, cxxxiv. 61, clx. 24, clxxiii. 24; vol. 1714–19, clxxxiv. 28, clxxxv. 43, clxxxvi. 16, clxxxvii. 44, cxc. 60, cxcii. 41, cxcix. 44, 45, 53, cciv. 63.

Foreign Series, vol. 1559–60, Nos. 550(6), 590(6), 640(3), 665, 859(13), 1066(4); vol. 1560–61, 74(3), 128(3), 148(1, 3, 5), 167(1), 187(1), 194(1, 2), 224(2, 10), 252(6), 328(2), 433(2, 3, 5), 450(3), 564(3), 716(30); vol. 1561–62, 13(2), 256(2), 300; vol. 1564–65, 171(3), 1168(2), 1220(1).

Domestic Series, vol. 1547–1580, p. 551; vol. 1566–1579, p. 563; vol. 1581–1590, pp. 147, 243; vol. 1591–1594, pp. 58, 67, 89; vol. 1595–1597, p. 353; vol. 1601–1603; addenda, 1547–1565, pp. 151, 160; vol. 1603–1610, p. 216; vol. 1633–1634, p. 357; vol. 1651, p. 291; vol. 1651–1652, p. 482; vol. 1652–1653, pp. 44, 58, 118, 119, 120 134, 342; vol. 1653–1654, pp. 42, 130, 137, 167, 213, 250, 263, 288, 289, 487; vol. 1654, pp. 402, 456; vol. 1655, pp. 138, 482; vol. 1655–1656, p. 155; vol. 1656–1657, pp. 8, 272; vol. 1657–1658, pp. 24, 55, 95, 96, 259, 308; vol. 1658–1659, pp. 88–92, 108, 140, 197; vol. 1659–1660, pp. 140, 254, 337, 406, 440; vol. 1660–1661, pp. 43, 586; vol. 1661–1662, pp. 46–58; vol. 1663–1664, p. 385; vol. 1666–1667, p. 483; vol. 1760–1765, Nos. 380, 609, 623, 1518, 1608, 1688, 1837, 1928, 1962, 1993, 1994, 1995, 2009, 2045, 2075; vol. 1766–1769, Nos. 40, 98, 123, 176, 225, 226, 229, 242, 253, 274, 277, 284, 569, 713, 904, 918, 1005, 1100; vol. 1770–1772, Nos. 55, 209, 1002, 1533, p. 626.

INDEX OF SUBJECTS.

N.B.—The figures in this Index refer to the Numbers of the entries in the Bibliography.

AFRICA, ancient and modern, 72
———, Christiana, 141, 205, 563
———, cruise along N. coast, 480
———, explorations in, 166, 170, 181, 182, 419, 420, 423
———, land and people, 357
———, map of ancient, 308
———, necrology of, 394
———, North and Central, travels in, 147, 148, 238, 242, 243, 247, 250, 251, 254, 255, 256, 262, 269, 284, 285, 286, 287, 319. See also Sahara, Cyrenaica, Tripoli.
———, North, ancient history of, 193, 195
———, ———, in antiquity, 305
——— under Roman domination, 192, 309, 441
African languages, 327. See Touareg.
Air, 465
Alfa fibre, 473
Anthropology, 557A
Antonine, itinerary of, 94, 216
Arabs, conquest of Africa by, 210, 259, 260
———, establishment of, in N. Africa, 406
Audjela, 158, 350, 353

BAINBRIDGE, Commodore, 149
Barbary States, ancient geography of, 201
Barca, 454, 501
———, account of, 184
———, conquest of, 215
Bengasi, 352, 365, 489, 490, 506, 507
———, exploration of, 229
———, plan of, 565
———, visit to, 81
Berbers, 259, 260, 294, 400
———, history of, 215
Berenice, 351
———, vase of, 383
Bibliographies, 198, 356–399, 411, 482, 518A, 537, 539, 578
Bilma, 331
Bishops of North Africa, 563. See Africa, Christiana.
Bomba, 299, 365
Bornou, 364, 374, 430
Botany, 152, 355, 381, 474, 499, 500
Bruce, James, life and travels of, 120, 130, 169, 438
Byzantine domination, 207

COMMERCIAL reports, British, 296, 297, 298, 311, 312, 313, 314, 324, 325, 335, 336, 340, 341, 345, 377, 378, 379, 380, 384, 385, 386, 387, 390, 391, 397, 398, 408, 409, 424, 425, 447, 448, 449, 460, 461, 462, 494, 495, 496, 535, 549, 558, 559, 567, 571
Commercial reports, Dutch, 253
———————, Italian, 410, 463, 468, 476, 485, 536
Commerce with N. Africa in Middle Ages, 562
Consular jurisdiction, 187
——— reports, see Commercial reports.
Consulates, French, origin of, 177
Consuls, establishment of, 110
Cœrippus, 418
Corpus inscriptionum Græcarum, 203
Cyrenaica, 171, 184, 185, 429, 438, 477, 491, 493, 511, 557, 565
———, colonisation of, 347, 531
———, description of, 38, 56, 92, 160, 161
———, explorations in, 120, 155, 156, 159, 191
———, excavations in, 288, 289, 310, 344, 366
———, excursions in, 414
———, Greek colonies, 189, 263
———, inhabitants of, 342
———, inscriptions from, 223. See Corpus.
———, journey in, 158
———, map of, 358
———, measures of, 107
———, plants of, see Botany.
———, travels in, 221, 222, 228, 258
Cyrene, 429
———, account of, 354
———, Greek colonies of, 189, 263
———, history of, 100, 113, 165
———, inscriptions from, 153. See Corpus.
———, ruins of, 383
———, visit to, 81
Cyrenian pottery, 383, 431, 432, 464, 479. See Panathenic.
——— marbles, 289

DECATUR, Commodore, 134, 149, 213
Derna, 365, 478, 490, 492, 502, 505, 509, 510, 529, 565
———, medical topography of, 280
———, plan of, 565
———, visit to, 81
Djalo, 350, 353

Djebel Tripolitain, 416
Djofra, 453
Dolfijn, corvette, voyage of, 178

EARTHQUAKE, 520
Eaton, General, 129, 133, 164, 270, 486
Ethnography, 301, 362

Fezzan, 306, 443, 444, 504
France, policy of, in Africa, 389

Geology, 568
Germany, Emperor sends presents to Wadai, 471
Ghadames, commerce of, 282
———, journey to, 401, 417, 439
———, mission to, 304, 471
———, Rohlfs at, 321, 327, 334, 338
Ghat, 465, 475
Greek colonies, see Cyrenaica.
Greek geographers, 96

HAREBORNE, Mr., 42, 43, 44
Herodotus, geographical system of, 123
Hesperides, garden of, 351
Hydrography, 421, 422, 427, 458, 497, 526, 527, 528, 540

INSCRIPTIONS, Greek, see Corpus.
———, Latin, 487. See Cyrenaica, Septis Tripoli.
———, Lybian, 382
Italian colonial policy, 554
Italians at Tripoli, 575, 579
——— in Cyrenaica, 538

"JESUS," capture of the, 37, 45, 46
Jews, 524
Johannide, 418
Jupiter Ammon, 84, 350
Justinian, wars of, 55

KUFRA, 451, 472, 516
Kuka, 343, 370, 371

LAING, Major, 157, 167, 175, 176
Lebda, 320
Leptis Magna, 186, 349
———, inscriptions from, 212
Lethe, 351
Lybia, description of, 204
———, history of, 98

MARADA, 158
Marbles, Cyrenian, 289
Marmorica, coast of, 527
———, description of, 56, 92
———, journey in, 158
Medical topography of Derna, 280
Mediterranean, memoir on, 244
Megalithic monuments, 415
Mesurata, visit to, 81
Mircher, Col., mission of, 210
Mohammedans, see Arabs.
Mourzouk, 126, 127, 330

NATRON found in Tripoli, 394
Necrology of Africa, 394
Nefousa, 281
Numismatics, 273, 348, 570

PANATHENIC vase, 224
Pedro Navarro, 19, 20
Pentapolis, see Cyrenaica.
Pharsalia, battle of, 84
Phœnician navigation, 179
Privilege to merchants of Barcelona, 21, 22

ROMAN administration, see Africa under.

SABRATHA, 349
Sahara, character of, 452
———, commerce of, 403, 483
———, travels in, 219, 220, 227, 233, 234, 402, 404, 430, 439, 455
Saharan railway, 459
Schubert, murder of, 316
Secret societies, 561
Senoussi, 498, 541, 545, 561
Sidi Hassuna D'Ghies, 175, 176
Sidra, Gulf of, 456
Silphium, 258
Slavery, white, 241
Slave trade in Tripoli, 555. See also Treaties—Tripoli.
Soudan, 455, 459
———, Egypt and Tripoli, 553
———, routes to, 569
Sponge fishery, 208
Sulphur mines, 208
Syrtis, emporiums of, 482
———, exploration of, 421, 422, 482
———, voyages along, 392, 533

TIBESTI, 359, 360, 504
Tibbu, 362
Tidikelt, 332, 333, 338, 339
Timbouktou, 389
Tinné, Mademoiselle, 316, 359, 363, 395
———, plans of her expedition, 355
Tobrouk, 365, 526, 527, 528, 532
Toleimeta, 365
Touaregs, map, 484
———, country of, 257, 302
———, language of, 214
———, travels amongst, 219
Treaties and vizerial orders, British, 60, 64, 78, 83, 103, 109, 131, 136, 137, 145, 218, 236, 245, 252, 265, 346, 426
———, French, 36, 40, 69, 85, 89, 125, 174
———, Venetian, 15, 16, 17
———, with Arabs in Middle Ages, 326
Tripoli, American diplomacy in, 237
———, American war with, 122, 128, 129, 140, 164, 241
———, ancient sites in, 279
——— and Assab, 546
——— and Cyrenaica, map of, 544
——— and Egypt, 548
———, artistic, 507
———, attack on, 31, 32
———, cities of, 278
———, commerce of, 162, 514, 515, 518,

523, 525, 547, 577. See also Commercial reports.
Tripoli, conquest of, 215
———, consular jurisdiction in, 388
———, corsairs of, 95
———, defensive power of, 368
———, description of, 38, 52, 56, 58, 132, 135, 138, 264, 276, 572, 576
———, excursions to, 261, 272, 277
———, explorations in, 120, 144, 146, 154, 191, 389
———, Florentine relations with, 303
———, foundation of, 34, 80, 81, 89
——— granted to Knights of Rhodes, 23
———, history of, 54, 101, 102, 106, 108, 171, 172, 180, 240, 249
———, inscriptions from, 104, 105
———, littoral of, 323
———, loss of, 26, 26A
———, mission to, 111
———, naval actions with galleys of, 30, 67, 68, 77, 87
———, notes on, 271
———, phenomena at, 70
———, piracy, 139
———, population of, 564
———, regency of, 230, 231, 235, 412, 413, 466, 467, 488, 498, 503, 504, 521, 522, 539
———, residence in, 143
Tripoli, Roman domination in, 268
———, slavery in, 53, 70, 74, 76, 90, 117, 241, 555. See also Slavery.
———, success of Catholic armada at, 29
———, taken by Spaniards, 19, 20
———, taken by Turks, 25, 197
Tripolitana, 552, 556, 560
Tripoli to Alexandria, 369
——— to Lagos, 445, 446, 542
———, travels in, 367, 481
———, two years in, 407
———, tyranny of Romans in, 189
———, views of, 28, 33, 59, 61, 62, 65, 66, 75, 78, 82, 86, 97, 115, 135
———, visit to, 428, 512, 518B, 519, 550, 551
———, voyage to, 393
———, war with, 49
Turkish empire, defensive power of, 368
———, history of, 71
Turks, invasion of Tunis from Tripoli, 211
Tuat, 329, 332, 333, 338, 339

VANDALS, domination of, 206
———, history of, 183
Vogel, biography of, 287
———, murder of, 315
———, search for, 300, 317

WADAI, 225, 376, 434, 474.

Oudney, Dr., the late, Major Denham, and Captain Clapperton, 154

PACHÔ, Raymond, 158–161
Paladini, Leone, 459
Pasqua, Dr., 471
Pastore, S., and Commandor Haimann, 490
Paulitschke, Dr. Philippe, 518*a*
Paulus Arosius, 9
Pellissier de Reynaud, E., 249
Perk, M. A., 407
Perrond, Cl., 482
Petermann, A., und B. Hassenstein, 306
————, Augustus, 243, 318
Pezaut, A., 146
Piesse, L., 551
Playfair, Sir Lambert, 438, 497
Pliny, 5, 248
Pomponius Mela, 4, 24
Porcher, Commander E. A., and Captain R. Murdoch Smith, 310
Posthumus, N. W., 395
Pouqueville, 177
Prax, Lieut. de Vaisseau, 230, 231
Primaudaie, Élie de la, 323
Procopius of Cæsarea, 10, 55
Ptolemy, 6
Puchstein, O., 464, 479
Purchas, Samuel, 50, 52

RAE, Edward, 428
Rawlinson, George, 266
————, Sir Henry, 266
Reade, Vice-Consul, 296, 311, 312
Reclus, Elisée, 560
Reinaud, M., 194
Rennel, Major James, 123
Richard, P. L., 484
Richardson, James, 214, 219, 233, 242
Ritter, Karl, 184
Rizetto, R., 522, 523
Rohlfs, Gerhard, 319–322, 328–332, 337–339, 343, 349–353, 357, 358, 369, 396, 405, 417, 435–437, 442, 450–454, 467, 472, 473, 516, 517, 524, 564
Rossoni, 468–470
Rotalier, Ch. de, 197
Rousseau, Alphonse, 240, 307
Rowe, Nicholas, 84
Russell, Rt. Rev. M., 171, 172

SAINT-MARTIN, Vivien de, 293, 305
Salazar y Murdones, P., 26
Sanders, Thomas, 37, 45
Sanson, Nicolas, 58
Sanudo, Marino, 19
Sanuto, M. Livio, 38
Schauenberg, Dr. E., 269
Schenkii, P., 78
Schloezer, August Ludwig von, 114
Schroeder, Lieut. Seaton, and Lieut.-Commander H. Gorringe, 458
Schweiger-Lerchenfeld, A. von, 512, 548
Schweinfurth, Dr., and Captain Camperio, 553
————, —. G., 527, 528
Scylax of Caryanda, 2
Segni, P. Philippe de, 364
Seller, John, 66
Sevestre, H., 393
Shaw, Thomas, 96
Shereef Mohamed Hassuna D'Ghies, 176
Skippen, E., 486
Slane, Baron MacGuckin de, 194, 196, 200, 210, 211, 215, 267
Smith, Captain R. Murdoch, and Commander E. A. Porcher, 310
Smyth, William Henry, 244
Solinus, Polyhistor, 8
Splaine, J. F., 518*b*
Sprenger, Aloys, 315, 316
Strabo, 3, 202
Subtil, E., 208, 209
Sumner, Charles, 241

TALMA, A., 178
Tassy, N. Laugier de, 88
Tauxier, H., 294, 301
———, L., 418
Ternaux-Compans, H., 198
Testa, E., 234, 253
——, J. F., 573
Thrige, J. P., 165
Tissot, Charles, 540
Tollot, Le Sieur, 99
Tonsis, Battistino de, 49
Tully, Richard, 143

ULLOA, Alphonso de, 32

VAN DER AA, Pierre, 82
Veth, Professor P. J., and Dr. C. M. Kars, 411
Villegagnon, Nicolas Durand de, 26*a*
Viviani, D., 152
Vogel, Dr. Eduard, 250

WAILLE, Victor, 537–538
Walkenaer, Baron C. A., 148–191
Walker, Consul-General, 324
Wiet, E., 365
Wilkinson, Sir J. G., 266
Wilmanns, Gustavus, 487
Wilson, James, Prof. Jameson, and Hugh Murray, 170
Wood, Consul, 559

ZANOSKI, Jean, 205–207
Zurcher et Margolle, MM., 363

HUDSON'S BAY AND STRAIT.

By Commodore A. H. MARKHAM, R.N.

HUDSON'S BAY AND STRAIT.

By Commodore A. H. MARKHAM, R.N.*

THE question of the practicability of navigating Hudson's Strait in safety during a certain period of the year, has lately excited much interest, and has occupied a good deal of public attention on both sides of the Atlantic for reasons apart from geography. At the same time it is a question of considerable geographical importance, especially when considered in connection with the movements of the ice in that region.

The reason that attention has recently been drawn to this out-of-the-way, and somewhat dreary, locality is, in a great measure, due to the fact that a scheme has been recently started, having for its object the construction of a railroad that would connect Winnipeg, and other important towns on the line of the Canada and Pacific Railroad, with some harbour on the shores of Hudson's Bay.

The inhabitants of the North-West are naturally desirous of possessing a seaport which they can call their own, situated nearer to their cattle-raising and grain-producing districts, than either Montreal or New York, to which ports all the produce of Manitoba and the North-West have hitherto had to be shipped for transportation to Europe. The only way by which this desire can be attained and their hopes fulfilled is by the creation of a seaport somewhere on the shores of the west coast of Hudson's Bay, connected by rail with Winnipeg, or some other large commercial emporium in Manitoba. This would give an outlet to the rapidly growing trade of the North-West, and would fill a want that has long been felt, and which is now pressing harder than ever on the residents of that great expanse of country situated in Canada, to the eastward of the Rocky Mountains.

I do not, however, in this paper, propose to discuss either the desirability, or the practicability, of constructing a railroad such as is suggested, but simply to write a brief history of what has already been achieved of geographical interest in Hudson's Strait and Bay, in view of the possibility of the route being sooner, or later, opened to commerce.

I experienced so much difficulty myself in obtaining information regarding these regions, and had to hunt up and refer to so many books

* An abstract of this paper was read before the Society at the Evening Meeting, June 11th, 1888, and published, with the discussion which followed, and a map in illustration, in 'Proceedings R.G.S.,' 1888, pp. 549 *et seq.*—[ED.]

on the subject, that I considered an account written for our Society, in a somewhat condensed form, would prove useful and of interest to the Fellows, and also to others, who may be desirous of becoming acquainted with a part of the world which may at no distant date become of considerable commercial and geographical importance.

The knowledge I have acquired of these regions has been gained by a careful study of the writings of our old navigators, and also of more recent reports, and this has been supplemented by the experience I gained during a voyage I made in the summer of 1886, in the *Alert*, through Hudson's Strait to York Factory, on the western shore of Hudson's Bay.

Hudson's Bay, or, as it has not been inaptly termed, the Mediterranean Sea of North America, is a large inland sea, situated between the parallels of 51° and 64° N. lat., therefore well outside the Arctic zone, and between the meridians of 78° and 95° W. long. It is about 900 miles in length from north to south, some 600 miles in breadth, and covering an area of something like 500,000 square miles.

Hudson's Bay is reported to be remarkably free from rocks and shoals, and it has an average depth of about 70 fathoms. So uniform are the soundings that our accomplished associate, Dr. Bell, of the Geological Survey of Canada, in a paper which he communicated to our Society in October 1881 on the commercial importance of Hudson's Bay, had no hesitation in saying, that if, through any convulsion of nature, this vast basin was to be drained of its water, we should find "an immense plateau similar to the prairies of the west."

I would here observe that there are few authorities on this subject, whose opinions should be received with greater respect than those of Dr. Bell, who has devoted many years of his life to the exploration of Hudson's Bay, and whose knowledge and experience regarding the physical geography and geology of that part of the world are so well known.

The same authority states that storms in the bay are very rare, and by no means formidable; that icebergs are never seen, and that fogs, the most dreaded enemy with which a sailor has to contend, are of rare occurrence, and of but short duration.

The climate of the shores of Hudson's Bay during the summer months is mild and genial, and many European vegetables, such as potatoes, lettuce, beet-root, and onions, are grown in the open air. The winters are, however, very severe; and the whole country, covered in a snowy mantle, has then to yield to, and acknowledge the power of, King Frost.

It is asserted that the temperature of the water in Hudson's Bay is no less than 14 degrees higher than the water of Lake Superior, and, in support of this assertion, Lieut. Gordon (who was sent by the Canadian Government in command of the recent expeditions despatched to Hudson's Bay for the purpose of reporting on its feasibility as a com-

mercial ocean route) writes, in his first official despatch' that "Hudson's Bay may, therefore, be regarded as a vast basin of comparatively warm water, the effect of which must be to considerably ameliorate the winter climate to the south and east of it."

The principal and, so far as we know at present, the only practicable approach to Hudson's Bay in a ship is through Hudson's Strait—a deep channel about 500 miles in length, which separates Labrador from the islands of Arctic America. The Strait has an average breadth of about 100 miles, but the width in the narrowest part of the channel is not more than 45 miles. The soundings in the Strait vary from 150 to 300 fathoms, and it is wonderfully free from shoals or rocks, or any other obstacles that would tend to make the navigation of a narrow channel more than ordinarily dangerous.

Although Henry Hudson has the reputation of, and is generally accredited to be, the discoverer of the Strait and Bay that bear his name, it is by no means certain that this claim can be substantiated. On the contrary, it is more than probable—and it is a probability amounting almost to a certainty—that the credit of this discovery is really due to earlier navigators.

It is well known that Sebastian Cabot made two voyages across the Atlantic, with the object of discovering a north-west passage to what was then called the South Sea. The first of these voyages was made in the year 1498, and the other in 1516.

During one of them, though it is not known which, it is almost certain that not only the Strait that now bears the name of Hudson was discovered, but also another Strait—that wider and broader expanse of water, which was subsequently named after another of our sea worthies, the brave and skilful navigator, John Davis.

My authority for this assumption is the fact that on Cabot's planisphere of 1544 (which is now in the Paris library), the west coast of Davis's Strait, is fairly accurately delineated as far north as latitude 67° 30′, and an opening, corresponding to the entrance of Hudson's Strait, is also shown as existing between the 61st and 64th parallels of latitude, and in about the 60th meridian of west longitude from Greenwich. This is almost the exact position of the Strait; if, therefore, it was only set down on the planisphere at haphazard, it must be regarded as a very curious coincidence, and a wonderful piece of prophetic geographical inspiration.

I cannot, however, help thinking that its position on the planisphere, is very conclusive evidence that the Strait was actually known to the geographers of the 16th century, a hundred years before Henry Hudson rediscovered it.

The Portuguese also, and with a great deal of justice, may fairly establish a claim, if not to the actual discovery of the Strait, at any rate to a knowledge of its existence, half a century prior to the sailing of Hudson on his last memorable and fatal voyage; for on maps which

are still in existence, and which bear the date of 1558, the Strait, leading to a broad expanse of water to the westward, is clearly shown.

As additional evidence in support of what I am now advancing, I may mention that a fair delineation of the coast line of Hudson's Bay is shown on the map of Ortelius, which was published in 1570, which proves that its existence was then known, though by whom discovered I have not been able to ascertain.

When Martin Frobisher sailed to the north-west in 1576, for the purpose of discovering a short route to India, he sought for a channel that was indicated on the chart with which he was supplied, and which, he thought, would lead him to the South Sea. This inlet, with which his name is now associated, he actually found in latitude 63°, and sailed up it for a distance of about 200 miles, when his further progress was arrested by ice.

In the following year Frobisher entered another strait, between the parallels of 60° and 62°; but as his instructions were somewhat stringent, confining him to the discovery of gold, and did not admit of his prosecuting a search for the north-west passage, however favourable appeared the prospects of success, he did not avail himself of the chance afforded him of exploring what was undoubtedly Hudson's Strait.

That able and accomplished navigator, John Davis, must also have had a knowledge of the existence of the Strait five and twenty years before Hudson entered it; for we are told that during his third voyage for the discovery of a north-west passage, in 1587, after making numerous discoveries to the northward, he steered in a southerly direction, and discovered and named Cape Chidley (or Chudleigh), the headland forming the south point at the eastern entrance to the Strait; and, if I am not much mistaken, he also discovered and landed on Resolution Island, the name subsequently given (but on whose authority I am ignorant—probably Sir Thomas Button's) to the island that forms the north point of the mouth of the Strait. Cape Chidley, I may here mention, was named after Mr. John Chudleigh, of Chudleigh, one of the principal promoters and supporters of the expedition entrusted to the command of John Davis, whose name was often spelt Chidley, and who subsequently died in the Strait of Magellan whilst on a voyage that had for its object the circumnavigation of the globe.

During the same voyage, Davis, on his return from the high latitude which he reached on the west coast of Greenland, was off the entrance to Hudson's Strait on the 1st of August. The circumstance is thus alluded to in his report:—"Which inlet or gulfe this afternoone, and in the night, we passed over: where to our great admiration we saw the sea falling down into the gulfe with a mighty overfal and roring, and with divers circular motions like whirlepooles, in such sort as forcible streames passe throw the arches of bridges."

Again in the year 1602, Captain George Waymouth, who was

employed by the Worshipfull Merchants of London trading into the East Indies, in an attempt to discover a north-west passage to India, in reporting the result of his voyage, states that he entered an inlet in latitude 61° 40′, which he represents as being 40 leagues broad, and up which, he asserts, he sailed a distance of 100 leagues. This inlet, from the position assigned to it by Waymouth, could have been no other than the one that is now known as Hudson's Strait.

I think I have brought forward sufficient evidence, and of a more or less authentic and reliable nature, to show that the Strait was, without doubt, known, although perhaps not explored, prior to the departure from England of the expedition commanded by Henry Hudson, and which sailed in 1610. And I think we may safely infer, that this very knowledge of its existence, was the inducement that led Hudson to attempt further exploration in that direction—feeling assured, as in all probability he did, that the opening in question offered the most likely chance of a successful issue to his undertaking, namely, a navigable passage to the South Sea.

In thus bringing forward the supposed claims of discovery of previous navigators, it is far from my intention to detract from the credit which is undoubtedly due to Henry Hudson. I am only desirous of pointing out that he was, in reality, guided to his discoveries by the beacons established by those who had preceded him; or, in the words of that quaint writer, and enterprising seaman, Captain Luke Fox (who subsequently commanded an expedition into Hudson's Bay), who, in writing of Captain Waymouth, says:—" these two, Davis and he [Waymouth] did, I conceive, light Hudson into his Straights."

As the men I have enumerated were before Hudson in the Strait and Bay that now bear his name, so, also, were others before him in the river named after him, and with the discovery of which he is generally accredited.

As far back as the year 1524, Verazzano, an Italian, was entrusted by Francis I. of France with a small squadron of ships, with directions to reach Cathay by the north-west. Whilst engaged in searching for a passage, Verazzano reached the mouth of what is now called Hudson river, and entered the harbour, on the banks of which is now situated the commercial capital of the United States of America. He was much impressed with its capacity, natural advantages, and the extreme loveliness of the scenery. A sudden and violent squall, however, compelled him to take a hasty departure, and he was thus prevented from making further exploration in that direction.

During the same year, a Portuguese pilot, named Estevan Gomez, was employed by the King of Portugal in endeavouring to discover a short route to the Spice Islands by the north-west, and, whilst so engaged, is reputed to have also sailed into the Hudson river; but the reports of this expedition are so vague and conflicting, that but little credence can be

placed in them. I have, however, considered it desirable to make a brief allusion to them here.

Although the name of Henry Hudson is invariably associated with that of a skilful and adventurous Arctic explorer, and although he is known to fame as a great discoverer of unknown regions, still the whole period of his known life extends only over a little more than four years, viz.: from April 1607 (prior to which he is absolutely unknown to history) until June 1611, when he was treacherously cast adrift on the scene of his explorations, by his mutinous and cowardly crew. Yet in that brief period, although unsuccessful in the achievement of the special work which he had undertaken to accomplish, namely, the discovery of passages to India by the north-east, by the north-west, and even across the North Pole itself, he has left a name which will always occupy a foremost place in that list of naval worthies who have done so much to promote the maritime supremacy of this country, by their heroic courage, their dauntless energy, and their skill and ability as seamen.

I fully endorse the remarks of the talented editor of 'Voyages towards the North-West,' published by the Hakluyt Society, and which, perhaps, I may be pardoned for quoting here. He writes: "Yet Henry Hudson's name is not forgotten. It is borne by his Strait, and by the Bay in which he wintered and died. It is inscribed on the vast territory between the Bay and the Pacific Ocean. It is affectionately remembered by the millions of human beings now living on those banks which he found scantily inhabited by savage races. Nor have his labours been fruitless. He has given to his own country the fisheries of Spitzbergen, and the fur trade of the Hudson's Bay Territories. The Dutch owed to him their North American colony, which has, afterwards, fallen into English hands, and is now peopled and ruled over by the united descendants of both nations.

"Thus, in spite of his failures, Hudson has created himself a far prouder monument than he would have dared to hope for. These successes may well be held out as an encouragement to those who, like him, labour earnestly and steadfastly in some great cause that may seem hopeless. Such labour is never cast away, if only they, like Henry Hudson, prescribe to themselves the rule, To achieve what they have undertaken, or else, to use his own words, 'to give reason wherefore it will not be.'"

It was in consequence of the reputation and experience that Hudson had obtained as a skilful seaman, and an intrepid Arctic navigator, during the three voyages he had made to the northern regions, that he was selected in 1610 for the command of the *Discovery*, which had been fitted out and equipped—chiefly at the expense of Sir Dudley Digges, Sir Thomas Smith, Mr. John Wolstenholme, and a few other gentlemen —for the purpose of attempting the discovery of a north-west passage.

All that was then known of Hudson was that in the year 1607 he

made a bold and daring attempt to reach India by sailing across the North Pole. His vessel, the little *Hopewell*, is described as a cockboat of about 50 tons, and his crew consisted of ten men, besides himself and son, the latter being a mere boy. This expedition was undertaken in the interest of "certain worshippfull merchants of London."

Although unsuccessful in the main object in view, still with such skill and energy did he conduct his little craft, that the latitude he then attained in the neighbourhood of Spitzbergen (viz. 81°), was never exceeded, or in fact ever reached, until Sir Edward Parry passed it more than 200 years afterwards.

In the year following (1608) Hudson was employed by the Muscovy Company, but on this occasion he was engaged in seeking a north-east passage to India and China.

This likewise resulted in failure, but it was during this voyage that a part of Novaya Zemlya was explored.

On his return his services were again called into requisition. This time it was on behalf of the Dutch East India Company, but it was again with a view of discovering the north-east passage. Meeting, however, with an impenetrable barrier of ice, which defied all his efforts to get through, he relinquished the attempt, and sailing across the Atlantic, discovered, and explored, the river that now bears his name, and at the mouth of which the present city of New York is situated.

This is the extent of Hudson's known service, prior to his being selected for the command of the *Discovery*. That he was a man of some note and a seaman of ability is evident, for we hear of him as being in command of a ship belonging to the Muscovy Company, an association whose reputation stood so high, that the very fact of a man being in their employment, and in command of one of their ships, was a sufficient guarantee of his skill and ability as a seaman.

It may not be out of place here to observe that it was the Muscovy Company, at the instigation and under the direction of Sebastian Cabot, that introduced a form to be carefully filled up on board all the ships in their employ, with certain daily observations to be kept under the immediate superintendence of the captain, from which has evolved the log books which every ship is now compelled to use.

The following clause directs the insertion of the observations in this parent of log books. "Item, that the marchants and other skilful marchants in writing shall daily write, describe, and put in memoire the navigation of every day and night, with the points and observations of the lands, tides, elements, altitude of the sunne, course of the moone and starres, and the same so noted by the order of the master and pilot of every ship to be put in writing, the captains generall assembling the masters together once every week (if winde and weather shall serve) to conferre all the observations and notes of the said ships, to the intent it may appear wherein the notes do agree, and wherein they dissent, and upon

good debatement, deliberation, and conclusion, determined to put the same into a common ledger, to remain as record for the company."

The clear, concise, and valuable narratives of the voyages of Davis, Hawkins, Lancaster, Baffin, Hudson, and other navigators, are, in a great measure, due to the adoption of the instructions which were first generally issued by the Muscovy Company.

Not only was Hudson a practical and experienced seaman, but he was also a skilful observer; for in spite of the many disadvantages under which he laboured, and the rudeness of the instruments in use at that time, the position of places laid down by him were ascertained with a fair degree of accuracy. I may also mention that Hudson has the reputation, although I believe it is a disputed one, of being the first Englishman who made observations on the dip, or inclination, of the magnetic needle.

The ship which he had been selected to command was a small vessel, or fly-boat as she is sometimes called, of 55 tons burden, named the *Discovery*, presumably the same that Captain Waymouth had commanded in 1602, when dispatched in quest of a north-west passage.

Her crew consisted of twenty-one men besides himself and son, who invariably appears to have accompanied him on his adventurous voyages. No less than four of the men, including the mate Robert Juet, had previously served under Hudson, two of whom nobly supported their chief when the mutiny broke out, and, electing to share his fate, accompanied him in the boat when she was cast adrift.

The *Discovery* sailed from London on the 17th April, 1610, and, after sighting the coast of Greenland, reached Resolution Island about the 24th of June, and entered the Strait which now bears his name. They were at first much troubled by the amount of ice they encountered, and for some time experienced great difficulty in making their way to the westward. To the land on the south side of the Strait, Hudson gave the name of "Desire provoketh," he being then in latitude 60°.

On the 11th July, fearing the approach of a storm, Hudson anchored under shelter of three small and rocky islands in lat. 62° 9′, to which he gave the name of the "Isles of God's Mercies." These are undoubtedly those islands marked on our present charts as the Middle Savage Islands. I do not know who is responsible for this change of name, a senseless and somewhat confusing one, as we already have on the north side of the Strait, two other clusters of islands named respectively, the Upper and Lower Savage Islands. The original names should, I submit, in justice to their discoverer, be restored; the exact position of these islands is given by Hudson, so that there can be no doubt regarding their identity. On the present Admiralty Chart the name of the "Isles of God's Mercies," has been allotted to a group of Islands which was never seen by Hudson, but which was subsequently sighted by Baffin, and to two headlands of which he gave the names of Fair Ness and

Broken Point. I would suggest that the name of Fair Ness Islands be given to this group. Sir Edward Parry, in the account of his second voyage, was unaware that this particular cluster of islands was the group discovered and named by Hudson the "Isles of God's Mercies," for he alludes to them in the following words:—"The small cluster of islands to which this [Saddle Back Island] belongs, is called in the charts the Middle Savage Islands, a name by which Mr. Davidson (the captain of the Hudson's Bay Company's vessel *Prince of Wales*) did not know them, nor can I find any authority for it, but which may serve to distinguish them as well as any other."

Leaving these islands, Hudson steered to the south-west for some distance, and then to the north-west until he reached the latitude of 61° 24′, when he sighted land (to the southward?), which he named "Hold with Hope," but it is difficult now to assign even an approximate position for this land. In about latitude 62° he again saw land to the southward, to which he gave the name of Magna Britannia, and this name should, I think, be reintroduced on our charts, as appertaining to that large extent of coast situated between Capes Hope and Wolstenholme.

On the 2nd of August Hudson sighted a prominent headland, to which he gave the name of Salisburie's Foreland, being evidently under the impression that it formed part of the north shore of the Strait. It was, however, an island which is now shown on the chart as Salisbury Island.

I cannot help thinking, from the context in Hudson's narrative, that the land thus named was really the south part of Nottingham Island, of which he, otherwise, makes no mention; yet, unless the weather was extremely foggy, which does not appear to have been the case, he must have been in sight of it during his passage to Cape Wolstenholme. The distance between this island and the main land, also lends support to my assumption.

On the 3rd of August, Hudson sailed between the islands now known as the Digges Islands and Cape Wolstenholme, and this is the last recorded incident in his journal.

For an account of the remainder of the voyage we have to trust solely to the narrative written by one of the survivors, a man named Abacuk Prickett, which, although of thrilling interest, contains but little geographical information, and even that little is of a very vague and unreliable nature. The places mentioned by this historian, such as Prince Henrie's Cape or Forland; King James his Cape, and Queen Anne's Cape or Foreland are quite unrecognisable, and therefore impossible to locate.

After passing Cape Wolstenholme, it seems quite certain that Hudson sailed to the southward, and eventually wintered in the neighbourhood of James Bay, but not before he had experienced some trouble with his

men, who, on more than one occasion, evinced a mutinous and insubordinate spirit. In fact, matters had come to such a crisis that Hudson considered it necessary to displace both the mate and the boatswain, and to appoint others to perform their duties. Affairs must have indeed been critical, when it was deemed essential, for the preservation of discipline and the maintenance of good order, to reduce the two officers holding rank next to the captain.

Considering the feeling that existed on board, and the fact that the *Discovery* was but ill supplied with stores and provisions, Hudson did not certainly act on the dictates of wisdom and prudence when he decided upon wintering. We have it on the authority of Abacuk Prickett, that when the *Discovery* left England she was only provided with provisions to last for an estimated absence of six months, although Hessel Gerritz informs us, that she was provisioned for eight months: in either case the supply of provisions was totally inadequate for passing a winter, for five months had already elapsed, since leaving England, when the decision to winter was announced.

I think, under the circumstances, it is not surprising that a spirit of insubordination was exhibited by some of the crew, for it can only be regarded as the act of an insane and infatuated man, to endeavour to eke out two or three months' provisions over a period of nearly twelve months, more especially when the rigours and hardships incidental to what may very fairly be regarded as an Arctic winter, are combined to a poor and insufficient supply of food.

On the 1st of November the ship was secured in winter quarters, and nine days after, she was completely frozen in.

The provisions, or rather what remained of them, were then portioned out in equal shares, and arranged on such a scale as to last during the winter; and a reward was offered to every man who could procure anything in the shape of game.

Shortly after the ship had been established in winter quarters, the gunner, John Williams, died; and, as is customary in such cases, then as now, his effects were sold by auction before the mast. According to Prickett, the bickerings and discussions between Hudson and the majority of his crew, which eventually resulted in open mutiny, were mainly caused by a dispute, between Hudson and some of the men, concerning the purchase of a "gray cloth gowne" belonging to the defunct gunner. From Prickett's showing, Hudson appears to have exhibited such a spirit of obstinacy, and want of tact, that would stamp him as being utterly unfit to be a leader and ruler of men; but then it must be remembered that Prickett may have had interested motives for concealing the truth, and for disparaging his chief. In whatever light, however, Hudson's conduct is viewed, I am afraid he did not show the sagacity of a wise and discreet leader when he resolved to remain out for the winter, knowing, as he must have known, that even with the exercise of the

most careful and rigid economy, his provisions would barely suffice for more than a few months; and if he trusted to the prospect of replenishing his supply by the slaughter of birds and animals in the spring, he was indeed depending on a very precarious chance of subsistence.

Fortune, however, seems to have favoured them in this particular, for we are told that for three months during the winter, they were able to provide themselves with an abundant supply of ptarmigan, no less than one hundred dozen of these birds being shot, or otherwise obtained, during that time; and, subsequently, they succeeded in shooting some swans, geese, and wild duck, although not without some trouble and difficulty. When these birds left, they were reduced to eating moss which they picked off the ground, and also some frogs, which they do not appear to have relished, for Prickett, referring to them, writes that they "were as loathsome as toads." On the breaking up of the ice in the early summer, they succeeded in catching some fish "as big as herrings, and some troutes." These additions to their slender stock of provisions, were as providential as they were unexpected.

At length the long and dreary winter came to an end, the ship was released from the icy bondage in which she had for so many months been imprisoned, and sailed away from her winter quarters in about the second week in June. On the 21st of that month the mutiny broke out, and Hudson with his son, and seven unfortunate companions (the majority of whom consisted of the sick and helpless) were put into a small boat and mercilessly cast adrift.

Thus perished Henry Hudson on the scene of the most important of his discoveries. No prouder tablet, or more imperishable epitaph, could better immortalise the name of a great man than he has, for his name is associated with that great inland sea that has in all probability a prosperous and, we will hope, a great future before it; a river that is already known to fame for its lovely scenery and commercial importance; and a vast extent of territory that only requires population and capital, to develop its mineral wealth and boundless resources.

Nothing more was ever seen, or heard, of Hudson and his companions, and so his actual fate will always remain wrapped in mystery.

A month after the heartless abandonment of the captain, the *Discovery* with the mutineers reached the neighbourhood of Digges Islands, with the object of replenishing their supply of provisions, by obtaining some looms (Guillemots) which they knew to abound there. Shortly after her arrival some of the men, whilst on shore, were attacked by the Eskimos, who killed four of their number. By a curious coincidence, or by what perhaps may be regarded as a judicial act of Providence, these four men happened to be the principal ringleaders in the mutiny, and thus was the outrage on Hudson avenged by a prompt and retributive justice. Of the remaining seven that formed the crew of the *Discovery*, one died of starvation during the passage across the Atlantic, whilst the other

six succeeded in reaching the coast of Ireland, alive it is true, but in a most woe-begone and emaciated condition, having subsisted for many days on sea-weed fried with candle-ends, and the skins of the birds that had previously been shot and eaten. To such an extremity of weakness had these men been reduced by the sufferings they had experienced, that only one man was capable of steering the ship. A new crew having been engaged in Ireland, the vessel was taken to Plymouth, and thence to Gravesend.

There does not appear to have been any inquiry made on the return of the ship to England, regarding the circumstances connected with the atrocious abandonment of Hudson. Perhaps the pitiful condition of the survivors, and the intense miseries they had experienced, were considered as sufficient atonement for their insubordinate and unjustifiable conduct; at any rate, we are told that two of the survivors, viz. Bylot the mate, and Abacuk Prickett the historian of the voyage, were actually employed in the expedition that sailed the following year to Hudson's Bay, under the command of Sir Thomas Button.

This expedition was despatched by the Company of Merchant Adventurers, with the sanction and under the immediate directions of the Prince of Wales, who drew up the instructions to be observed.

The following are extracts from the "Charter granted to the Company of the Merchants Discoverers of the North-west Passage. Alfred Bletsoe, July 26th, 1612."

"A. Beginning.

James, by the grace of God King of England, &c. Whereas we are credibly informed that our Cozens and Councellors Henry Charles Earl of Northampton, Keeper of the Privy Seale; Charles Earl of Nottingham, Admirall of England; Thomas Earl of Suffolk, Chamberlain of our oun household; our right trusty and well beloved Cozen Henry Earl of Southampton; William Earl of Salisbury, our right trusty and well beloved Theophilus Lord Walden, Sir Thomas Smith Maunsell, Sir Walter Hope, Sir Dudley Diggs, Sir James Lancerote, Knights; Rebecca, Lady Romney, Francis Jones one of the Aldermen of our City of London; John Wolstenholme, Esq., John Edred Robert Sandy, William Greenwell, Nicholas Seats, Hovet Stapers, William Russell, John Merricks, Abraham Chamberlaine, Philippe Burlomathis, merchants of the Cittie of London, the Muscovy Company and the East India Company of the sixth voyage did in Aprill one thousand six hundred and tene, with great charge sett forth a shippe called the *Discoverye*, and certaine persons under the command of Henry Hudson, to search and find out a passage by the north-west of America to the Sea of Sur, commonly called the South Sea, and have in that voyage found a streight or narrow sea by the which they hope and purpose to advance

a trade to the great kingdoms of Tartaria, China, Japan, Solomons Islands, Chili, the Phillippines, and other countreys in or upon the said sea. . . ."

At the bottom of this charter appears

"B. Summary of the grant.

"This bill conteyneth your Majesty's grant unto the merchants of London, discoverers of the north-west passage, to be made and treated a corporate body, and to be invested with powers and capacities theretunto incident, so that the trade through that passage may be managed with some order and government, and not loosely at the discretion of every private adventurer. The frame and constitutions of this company is not restrained to any number certain, nor confined to any particular citty, town or place, nor tending to any degree of monopoly. The Prince is the supreme protector, under your Majesty, of this Company. The custom subsidy, and impost accruing to your Majesty of all goods and merchandize shipped outwards and homewards through the said passage, in the 7th year after the date of the present patent (by which time it is conceived the trade may settle and groue somewhat beneficiall) are therein graunted to the first discoverers, in consideration of their charges in the discovery; and the like graunt to Captain Button, and the masters and marines in the two shippes lately sett forth for the perfecting of the said discoverye, of the customs subsidy and impost happening in the 5th year after the date of the present patent (which as supposed will be a lesse matter) in consideration of their services therein."

The main object of the expedition that was sent forth under the command of Sir Thomas Button was, undoubtedly, the discovery of the North-west Passage, but let us hope, in the name of humanity, that the expedition was also undertaken with a view of searching for Hudson and those who shared his fate, although no mention of it is made in the brief account that has been handed down to us of this voyage.

The expedition consisted of two ships, the *Resolution* and the *Discovery*.

The leader, Sir Thomas Button, was a gentleman in the service of Prince Henry, and, we are informed, was an able and skilful seaman, and a man of considerable talent. Most elaborate instructions for his guidance were drawn up under the superintendence of His Royal Highness. The ships were provisioned for eighteen months, and sailed from England early in May 1612. On arrival in Hudson's Strait, they proceeded with all despatch, and without much hindrance from ice, to Digges Island, where they remained for eight days, and, we will hope, that during that period a diligent search was instituted for the unfortunate castaways, but no mention of such a search is recorded in the narrative of the expedition, although Bylot and Prickett were both

serving in one of the ships. Natives were, however, seen and communicated with, and it is sad to relate that, instead of ingratiating themselves with these people, our countrymen came into serious collision with them, and in attempting to seize some of their boats, five of Button's men were slain by the Eskimos.

So hostile were the natives in this neighbourhood reputed to be (although in all probability their hostility was the result of the high-handed behaviour of the men of the expedition), that I fear it only too plainly shows what the fate of Hudson and his companions would have been had they fallen into their clutches.

From Digges Islands they proceeded to the westward, where the land was discovered to which the name of "Cary's Swan's Nest" was given, but which is now known as Southampton Island. Thence they continued their course to the westward, until land was again fallen in with in lat. 60° 40′, which was called "Hopes Check'd," because they were disappointed in not finding the passage they were in search of. This land is, I think, that headland marked on our present charts as Cape Esquimaux. It is much to be regretted that the only account obtainable of the voyage of Sir Thomas Button, should be so meagre and so wrapped in needless mystery.

After sighting Hopes Check'd, the ships steered to the southward, when, being assailed by a violent storm, they anchored for shelter and to repair damages off the mouth of a river, which was called Nelson river, after the master of the *Resolution*, who died and was buried there. The mainland received the name of New Wales, after the Prince of Wales, and the bay into which the river emptied itself was called Button's Bay. Sir Thomas Button may, I think, fairly claim the honour of being the first navigator to sail across Hudson's Bay.

Although it was only the middle of August when the Nelson river was reached, it was decided that the winter should be passed there, and the necessary preparations were made for doing so. Apparently there was abundance of game obtainable, for we are told that, among other things, 1800 dozen white partridges (ptarmigan) were killed in the neighbourhood of their winter quarters. During the month of February, and subsequently, the cold was intensely severe; many of the men died from the effects of it, whilst the survivors were reduced to a very weak and sickly condition.

In April the ice commenced to break up, but it was not until June that the ships made a move. They then steered to the northward, and discovered land in lat. 60°, which was called Hubbart's Hope, after the pilot of the *Resolution*, because a strong tide race that was observed was hoped to be indicative of the passage for which they sought. In July they were off Hope's Advance, seen and named the previous year, and on the 26th of the same month, Ne Ultra, in lat. 62° 42′, was named. Three days afterwards, they reached their highest latitude, which is

reputed to be lat. 65°. Sailing then to the eastward, Mansel's Island was discovered, and named—not Mansfield Island, as in our present charts—and the west extreme of Southampton Island was named Cape Southampton, whilst the east end was called Cape Pembroke.

I am not quite sure as to whether Mansel Island was named after Sir Thomas Smith Maunsell, one of the Company of Merchant Discoverers for the North-west Passage, and referred to in the charter granted by James I., or whether it was named after Sir Robert Mansils.

No difficulty from ice was experienced in sailing through the Strait on their way to England, but instead of emerging from what may well be considered as the main entrance to the Strait, namely, between Resolution Island and Cape Chidley, the ships were taken through a strait which was then, for the first time, found to exist between the island, of which Cape Chidley forms the northern extreme, and the main coast of Labrador. This channel has lately been named M'Lellan Strait, after the Canadian Minister of Marine and Fisheries, under the impression that it was a new discovery.

The insularity of the land, on which is situated Cape Chidley, having without doubt been determined by Sir Thomas Button, it would, I think, only be appropriate, and a graceful act of recognition of the many services performed in these waters by a ship bearing the name of *Discovery*, to name the island Discovery Island. We should then have the entrance to Hudson's Strait marked, on its north and south sides, by the names of vessels that have done good service in the Arctic Regions and elsewhere, and the names of the two first ships, the *Discovery* and *Resolution*, that ever passed a winter in Hudson's Bay, would thus be commemorated.

The fact of Sir Thomas Button's ships having sailed through the strait referred to, is thus, on the authority of Abacuk Prickett, alluded to by Captain Luke Fox:—"They came not through the maine channell of Fretum Hudson, nor thorow Lumley's Inlet; but through into the Mare Hyperborum betwixt those ilands first discovered and named Chidley's Cape by Captain Davis, and the north part of America, called by the Spaniards, who never saw the same, Cape Labrador, but it is meet by the north-east point of America, where was contention among them, some maintaining (against others) that them ilands were the Resolution, which Josias Hubbart withstood, untill he stood himselfe into the danger of displeasure; but at length it proved a new Streight, and a very streight indeed to come through which resolved all doubts."

Sir Thomas Button's expedition was undoubtedly a failure; no discoveries of any importance were made; no light was thrown on the existence of a north-west passage in the locality in which he was supposed to be exploring, and he failed to succour Hudson, or to ascertain any particulars regarding his fate and that of his unfortunate companions.

That he felt keenly his want of success is certain, and that he did not regard the discovery of a passage as impossible is also assured, on the

authority of a fragment of his journal, which was communicated to Captain Luke Fox by Sir Thomas Rowe. In it Button writes:—"That God that made us all of dust, will not fail to raise up some good spirits for the future prosecution of this businesse: as that by their honest endeavours, and religious resolutions, they will effect that which is not ripe for his sickle. God which best knows what the truth of his endeavours have been in this action, will not faile to give a blessing to some that followe; and for his part he desires to be blest no otherwise than as he hath sincerely laboured; and therefore he must conclude and even believe according to the word, that *Paul* plants, *Apollo* waters, and *God* gives the increase. So that until his good will and pleasure is, all that we doe cannot in this aught else prevaile."

His predictions, however, have never yet been realised, at least in the sense that he anticipated, for no practical north-west passage has been discovered, so we may infer that it is not yet "ripe for the sickle."

The next expedition to Hudson Strait sailed in 1614, and was entrusted to the command of a Captain Gibbons, who had served as a volunteer in Button's voyage. The records of this expedition are exceedingly brief, and may be summed up and dismissed in the following somewhat laconic and quaint account of it given by Luke Fox. He says:—"Little is to be writ to any purpose, for that hee was put by the mouth of Fretum Hudson, and with the ice, driven into a bay called by his company 'Gibbons his Hole,' in latitude about 57°, upon the north-east point of Stinenia, where he laid twenty weekes fast amongst the ice, in danger to have been spoyled, or never to have got away, so as the time being lost, hee was enforced to returne."

The bay in which Gibbons passed so many idle and fruitless weeks, is supposed to be somewhere in the neighbourhood of Nain, on the coast of Labrador, where there is now a Moravian mission establishment.

In no way discouraged by previous want of success, the enterprising company of merchant adventurers again, the following year, despatched the little *Discovery* with the object of renewing the search for a North-west Passage. Robert Bylot, who had served in the three preceding voyages, namely, those under Hudson, Button, and Gibbons, was placed in command, but William Baffin, an experienced and accomplished navigator and a skilful and scientific observer, was appointed as pilot and mate, and, I think, shared with Bylot the responsibility of command. It is at any rate, to Baffin that we are indebted for an account of the voyage.

The *Discovery* left England on the 16th of April, 1615, with a crew consisting of fourteen men and two boys. On the 27th of May Resolution Island was sighted, and the Strait entered shortly after. On the 8th of June the Savage Islands were reached and named, and it was observed that they had "a great sound or indraught between the north shoare and them." I make particular allusion to this because a claim has recently

been made of the discovery of this strait. Baffin's claim, however, dates back 270 years, and is undeniable. The strait I allude to is also referred to as being well known by a Captain Coats, who was for many years employed by the Hudson's Bay Company in command of one of their ships. In a MS. entitled "The Geography of Hudson's Bay," written by him in 1750, he calls this channel the "White Streights."

On the 19th of June the *Discovery* reached Broken Point, and an adjacent headland was named, by Baffin, Fair Ness. The neighbourhood of these two capes, or points, is memorable as being the place where the first lunar observation for finding the longitude was taken by the untiring Baffin.

This incident is thus referred to by Sir Edward Parry:—"On the 29th we were off a point of land having several islands near it, and exactly answering the description of that called by Baffin, in the year 1615, Broken Point, it being indeed a point of broken island. This headland is memorable on account of a lunar observation made off it by this able and indefatigable navigator, giving the long. 74° 05′, which is not a degree to the westward of the truth."

Alluding to the fact of his having succeeded in taking a lunar observation at this place, Baffin makes the following very pertinent remark:—"If observations of this kinde, or some other, were made at places far remote, as at the Cape Bona Esperanza, Bantam, Japan, Nova Albion, and Magellan Strayts, I suppose wee should have a truer geography than we have." Unfortunately, however, those days did not produce many such skilful and practical seamen and such scientific observers as Baffin undoubtedly was. His practical knowledge enabled him, during the passsge of the *Discovery* through Hudson's Strait, to produce a most interesting chart on which the coast line and prominent points and islands are very accurately delineated, in fact, some of the positions on Baffin's map are even more correctly placed than on the present Admiralty Chart. A facsimile of his chart is reproduced in Mr. Clements Markham's "Life of William Baffin," published for the Hakluyt Society.

Although the *Discovery* was somewhat delayed during the passage through the strait by loose ice, they found that by adhering to the north side of the channel, the difficulties were materially lessened, and such good progress did they make, that by the 1st of July they succeeded in reaching the neighbourhood of Salisbury Island. On that day the Mill Islands were discovered and named by Baffin "by reason of the greate extremetye and grindinge of the ice, as this night we had proofe thereof." The position of the main island of this cluster was ascertained to be in latitude 64°. During the month of June the winds were variable, but the weather was extremely fine; a steady set to the westward was experienced, for Baffin reports that the ship was set more into the strait during one flood, than two ebb tides would set them out.

This entirely accords with the experience of the majority of those who have subsequently navigated the strait.

In the vicinity of the Mill Islands, however, Baffin reports the flood tide as coming from the *south-east*, but this, I cannot help thinking, is an error, and *north-east* is really meant. He must, I think, have been sorely perplexed by the eddyings and tide-rips which are well known to exist near this cluster of islands, and was, therefore, in all probability, unable to determine with his usual accuracy, the exact direction of the flood tide. He thus writes of these eddies: "The ilande or iles lying in the middle of the channell, havinge many sounds runninge through them, with dyvers points and headlands, encountering the force of the tyde, caused such a rebounde of water and ice that unto them that saw it not is almost incredible. But our ship being thus in the pertition, betweene the eddy which runne one way, and the streame which runne another, endured so great extremytie, that unless the Lord himselfe had beene on our side we had shurely perished; for sometymes the ship was hoysed aloft; and at other tymes shee havinge, as it were, got the upper hand, would force greate mighty peeces of ice to sinke doune on the one side of her, and rise on the other. But God which is still stronger than either rocks, ice, eddy or streame, preserved us and our shippe from any harme at all. And I trust will still contynue his love to us, that we may performe some more acceptable servis to his glory, and to the good of our common welth."

From the Mill Islands, Baffin sailed up, what is now known as, Fox Channel. On his way he landed on a point of land on the west side, which he named Cape Comfort, in consequence of the discovery that the tide flowed from the northward, which, to use his own words "put us in great hope of a passage this waye." According to his observations this cape was situated in 65° N. lat. and 85° 20′ W. long., but Sir Edward Parry in 1821 determined the position of this headland as 64° 54′ N. lat. and 82° 57′ W. long.

On the following day Baffin's joyful anticipations of discovering a passage, received a severe and sudden check, for they found the land trending away to the north-east by east; the water also shoaled considerably; they were much hampered by ice, and there was but little tide. All these indications were unfavourable to the supposition that they were in the eagerly sought-for passage, and only too surely proved that they were in a large bay. Under these unpropitious circumstances, the hopes of finding a passage in the direction they were seeking were abandoned, and the ship's head was turned to the southward. On their way south, Seahorse Point was sighted and named by Baffin, from "the Store of Morses" which he there saw.

But little, after this, was done in the way of exploration, and on the 30th of July the *Discovery* commenced her homeward voyage. In four days' time she reached Resolution Island, thus showing that at that

particular time of the year there was but little, if any, ice in the Strait to impede her progress.

During the voyage, the account of which I have just related, the indefatigable Baffin took no less than twenty-seven observations for ascertaining the variation of the compass, besides the daily observations for determining the position of the ship and various points of land.

The great mistake that Baffin, and indeed all the old Arctic navigators made, was relinquishing exploration so early in the navigable season, but it must be remembered they were then unaware of what we now well know, namely, that the best months for exploring in high latitudes, when there is a minimum amount of ice, are August and September, and even in October, in spite of the short days and long nights that are experienced in the last-named month. They thought, and it is very natural they should think so, that the navigable season commenced to wane when the sun reached its greatest northern declination, and, warned by the increasing shortness of the days, and the corresponding increase of the nights, they invariably sought winter quarters or made preparations for their homeward voyage, at the very time they should have been diligently engaged in exploratory work.

In 1619 Captain Hawkridge, who had acquired a reputation as a seaman and a navigator whilst serving under Sir Thomas Button, was entrusted with the command of a ship, and despatched in search of a north-west passage viâ Hudson's Strait. This voyage, however, appears to have been barren of important results. It seems that the expedition sailed up the Strait, with but little hindrance from ice, as far as Charles Island, and then cruised about for some time off some coast, but where is not clearly shown. There is only a very meagre account of this expedition in existence, written by Captain Luke Fox, from information obtained at the time "by manuscript or relation."

During the same year (1619) the Danes, their attention having in all probability been directed to the recent discoveries of Hudson, Baffin, and other English navigators, also despatched an expedition, but whether the object of it was the discovery of a north-west passage, or whether it was sent out for the purpose of searching for the lost Danish colonies in Greenland has never very clearly been ascertained. The command of it was entrusted to Captain Jens Munk, and the two ships that composed it were, we are told, manned chiefly by English sailors, men who had, very likely, been engaged in the whale-fishery, or who had perhaps served in some of the many voyages of exploration that were undertaken in the early part of the century to the north-east, as well as to the north-west.

The ships sailed from Denmark on the 18th May, and sighted Cape Farewell (the south point of Greenland) on the 20th of June.

They then attempted to sail up Davis Strait, but meeting with much ice, Captain Munk steered to the westward, proceeded up Hudson's

Strait, and thence into Hudson's Bay. He gave new names to places that had already been discovered and named by previous navigators, but these Danish names have long ceased to exist on the charts. At length they reached the west side of Hudson's Bay, and here Munk decided upon wintering in a bay which he called Munk's Winter Harbour, and which is supposed to be one of the many bays or harbours in the neighbourhood of Chesterfield Inlet. They appear to have been wretchedly provided and equipped in every respect; long before the winter was over their provisions were expended, although they had been exceptionally fortunate in shooting several bears, besides foxes, hares, ptarmigan, and other birds before the winter set in. Scurvy also attacked them with such virulence that many died, and the survivors were so emaciated and reduced by disease as to be absolutely helpless. Famine now stared them in the face, for their provisions were all expended, and they had no strength left to organise hunting parties for their relief, although with the return of spring, animals and birds appeared in great numbers.

Captain Munk, who occupied a small hut by himself, was reduced to a similar condition, and lay weak and helpless, daily expecting, and hoping, that death would soon terminate his sufferings. At last, overcome by the cravings of hunger, he managed to crawl out, when, to his horror, he found that all his companions, the crews of both ships, save two men, had perished from the combined effects of disease and starvation. The three miserable survivors, summoning up a little courage and energy, scratched away the snow from the ground on which they lay, and finding some plants and roots, devoured them eagerly. In course of time they succeeded in catching some fish in the river, which so revived and strengthened them that they were soon after able to shoot some birds and other animals.

Eventually, equipping the smaller vessel of the two from the stores of both, and laying in a stock of provisions sufficient to take them across the Atlantic, these three men embarked and started on their homeward voyage. Passing through Hudson's Strait with little or no difficulty, after an adventurous passage, they arrived safely at a Norwegian port on the 25th September, 1620, and were subsequently received in Denmark, as they well might be, as men risen from the grave. I will not vouch for the authenticity of this story; its genuineness has been frequently questioned; I simply give it here for what it is worth. If true, this expedition was, I believe, the first, and last, Danish one that ever ventured into Hudson's Bay.

After the failure of the expeditions of Button and Baffin, the excitement regarding the discovery of a North-west Passage appears to have, for a time, subsided, nor does the subject seem to have been revived again until the year 1631, when Captain Luke Fox, who, somewhat conceitedly, called himself "North-West Fox," by dint of much perseverance, succeeded in so far interesting a few London merchants, that,

backed up as they were by the powerful support of Sir Thomas Roe, Sir John Wolstenholme, Sir John Brooke, and Mr. Henry Briggs (the famous mathematician) they determined upon the despatch of another expedition.

Not only did Captain Fox persuade these gentlemen to assist him in the venture, but he also induced the two last named to present a petition to Charles I., supplicating the loan of one of His Majesty's ships, and "for his countenance of the voyage," and we are pleased to find that His Majesty "graciously accepted and granted both."

A ship named the *Charles*, of 80 tons burden, was selected. Her crew consisted of twenty men and two boys, and she was provisioned for an anticipated absence of eighteen months. As Captain Fox informs us, in his quaintly written account of the expedition, "I was victualled compleatly for eighteen months; but whether the baker, brewer, butcher, and others were masters of their arts or professions or no, I know not; but this I am sure of, I had excellent fat beefe, strong beere, good wheaten bread, good Iceland ling, butter and cheese of the best, admirable sack and aqua-vitæ, pease, oatmeale, wheatmeale, oyle, spice, suger, fruit and rice, with chyrurgerie, as sirrups, juleps, condits, trichissis, antidotes, balsoms, gummes, unguents, implaisters, oyles, potions, suppositors, and purging pils, &c." In fact, he seems to have been excellently well supplied with every requisite.

Fox sailed from Deptford on the 3rd of May, 1631, and arrived off Cape Chidley on the 20th June. He at once pushed on through the Strait, and with apparently such haste and energy as to provoke a protest from his officers, who were induced to ask him his reasons for hastening on so fast, and why he did not give them more rest. The reply was characteristic of the man: he said, "that it fared with him as with the mackerell men of London, who must hasten to market before the fish stinke."

His description of the ice that he encountered in the Strait is so good, and so exactly coincides with my own experience of the ice in the same locality, that I make no apology for introducing it here.

He writes that the ice in the Strait consists of two kinds, one of which is "as mountainous ice, which is a huge piece, compact, of a great quantity, some of more, somme of lesse; but in this freet you seldome have any bigger than a great church, and the most thereof lesse;" this, of course, has reference to the icebergs met at the entrance, and in the eastern part, of Hudson's Strait. He then describes, as follows, the floe, or pack, ice that he saw. "The other is smaller, and that we call masht or fleacht ice. Of this you shall there have numbers infinite, some of the quantity of a rood, some a pearch, ½ an acre, some 2 acres; but the most is small and about a foot or 2, or more above the water, and 8 or 10 or more under the water, and those are they which doe inclose you; so as in much wind, from the topmast head you shall hardly see any water for them, but while you lie amongst them, it is so smooth as you shall not feele the ship stirre."

It would not be possible to give a more accurate description of the conditions of the ice in Hudson's Strait at the present day than this account furnished by Captain Fox more than 250 years ago. It exactly describes the peculiar nature of the ice that is usually met with during the navigable season in this channel, and which I have not observed in any other part of the northern regions.

Captain Luke Fox was evidently a man of humour, as the following anecdote will show. Having to reprove one of his officers publicly for showing discontent at being called up earlier than usual one morning to get the ship under weigh, he says, "I told the rest that the matter was not great, for the children did so when they were awaked out of their sleep." He goes on to say that "this fayre dayes west wind blew cold and uncouth from out the passage [meaning probably the north-west passage that he hoped to discover]. Wee are all upon kind tearmes, drinking one to another. God hold it. This morning (July 3) the sunne lickt up the fogges dew, as soone as hee began to rise, and made a shining day of it; I cannot say hot, it being counter-chect by a coole top-sayle gale from west north west, which made our noses runne."

Fox, apparently, experienced but little opposition from the ice during his passage through the Strait, for in about three weeks after entering it he was in the vicinity, or had already passed, Cape Digges, Nottingham, and Mansel Islands. On the 21st July he was off Cary's Swan's Nest, thence sailing along the north-west coast of Hudson's Bay, he discovered an island which he named Sir Thomas Rowe's Welcome.

This name was subsequently applied, not only to the island originally so called, but also to the strait, or channel, in which it is situated, and which is now invariably alluded to as "The Welcome."*

From the Welcome, in accordance with his written instructions, Fox sailed to the south-west, in order to search for the passage which was supposed to exist south of the 63rd parallel. On his way he discovered an island, which he called Brooke Cobham, and a small group of islands adjacent which he named "Brigges his Mathematickes," after the two gentlemen who were mainly instrumental in presenting the petition to Charles I.

On the 2nd of August he was off an island which he assumed to be the Hopes Check'd of Sir Thomas Button, and on the 10th he entered the Nelson river, where he anchored in a snug berth that afforded the necessary facilities for refitting his ship, and for constructing a small pinnace that had been brought out in pieces from England.

Here he found, and restored, a cross that had been put up in 1612 by Button, as a symbol of his having taken possession of the land.

After leaving the Nelson river, Fox sailed along the coast to the southward, meeting on the 30th August the *Maria*, which ship had that

* This island was, in all probability, that to which the name of Ne Ultra was given by Sir Thomas Button.

year been despatched by the merchants of Bristol, under the command of Captain James, also for the purpose of discovering a north-west passage. This was the first meeting of the two ships, although they had been very close to each other on several occasions in the Strait, and also off Resolution Island, without, however, being aware of it. They remained in company for a day, exchanging visits, &c., when they separated, Fox continuing his course to the southward. In latitude 55° 14′ he was in sight of land, which he named "Wolstenholme's Ultima Vale," and then, having made up his mind that no prospect offered of discovering a passage between latitude 65° 30′ and 55° 10′, he steered to the north-east. This was on the 3rd of September, when the days were already becoming perceptibly shorter, and the navigable season drawing to a close.

On the following day he discovered an island in latitude 57° 55′ which he named "The Sleepe." On the 7th he saw the "Cary's Swan's Nest" of Button, and the next day he sighted Cape Pembroke in latitude 62° 23′.

Thence shaping a course to the north-east, he discovered and named two points of land, respectively, Cape Linsey and Point Peregrine. On the 14th he was off Seahorse Point, and saw the Mill Islands the following day; he appears to have taken the ship through some channel or strait, to the westward of these islands, to which he gave the name of "Hurin's Through-let."

In this neighbourhood he remained for three days, when he continued his course northwards, naming two prominent headlands "King Charles his promontory" and "Cape Maria," the former in latitude, by estimation, 64° 46′, and the latter in 65° 13′.

Three islands to the northward of King Charles Promontory were called the Trinitie Islands, and a fourth was named Isle Cooke.

On the 20th September, a headland was passed in latitude 65° 50′, to which Fox gave the name of Lord Weston's Portland, and on the 22nd he reached a point, which he places in latitude 66° 47′, where, he says, the land trended south-east, and to which he gave the name of "Fox his farthest."

Here Fox having, from observations taken, arrived at the conclusion (subsequently ascertained to be an erroneous one) that the flood tide came from the south-east, and that there was, in consequence, no hope of a passage in that direction, and as several of his men were attacked by scurvy, resolved to discontinue further research and to sail for England. He, like his predecessors, imagined that the navigable season in high latitudes terminated in August, although his own experience ought to have convinced him that such a reasoning was fallacious, for it was not until late in September that he decided to return, up to which time his progress had been but little impeded by ice; indeed the word ice, as an obstacle to navigation, does not even appear in his narrative during the entire month of September. He was, however, evidently appre-

hensive of being caught by the winter, and although he does not mention seeing ice in large quantities, he writes, as his reason for relinquishing further exploration, that "the weather had beene for about 3 weekes before, nothing but snowe, frost and sleet at best, ourselves, ropes and sayles froaze, the sun seldome to be seene, or once in five dayes, the nights 13 houres long, the moone wayning. And in conclusion, I was enforced either to seeke for harbour, or freeze to death in the sea." This was rather an exaggerated view to take of his position, although it is one that we cannot blame him for accepting, but we now know that the months of September and October, in spite of the indisputable fact that the days are getting shorter and the temperature decreasing, are the best months for navigating the Strait, as it is then practically clear of ice.

In connection with the decision arrived at by Fox with regard to the tides, Sir Edward Parry, an unquestionable authority, writes:—"There can be little doubt that this irregularity is principally occasioned by a meeting of the tides hereabouts, for there is tolerable evidence of the flood coming from the northward down the great opening leading to Fox's Farthest, and which I have called Fox's Channel. This tide meeting the rapid stream which sets from the eastward, through Hudson's Strait, must of necessity produce such a disturbance as has here been noticed."

Further on, Sir Edward writes:—"Baffin particularly insists on this being the case (viz. the northerly set of the tide down Fox's Channel) both near Trinity Islands and off Southampton Island, and I think, notwithstanding a contrary opinion held by Fox and Gourin, our observations of the tides in this neighbourhood, and subsequently at Winter Island seem to confirm those of Baffin."

There is yet much to be learnt regarding the direction and force of the tides, in the regions that are situated immediately to the northward of Hudson's Bay, and also in Hudson's Strait itself. Later experience, however, goes very largely to prove that Sir Edward Parry's deductions, based on observations made during a sojourn in the neighbourhood of three summers and two winters, were correct, and that Fox's conclusions were erroneous.

Although Fox had abandoned all hopes of discovering the North-west Passage, he continued his explorations during the return journey, and did not fail to name several promontories, headlands, islands, &c., in his quaint fashion.

Standing to the south-east on the 22nd September, he discovered a headland and named it Cape Dorchester. Passing Baffin's "Prince Charles's Foreland," he observed a "faire sound," to which he gave the name of "The Prince his cradle," whilst an island situated to the westward was called "The Prince his nurse."

A headland, E.S.E. ten leagues from Prince Charles's Foreland, he

named Cape Dorset, whilst another cape three leagues further to the eastward he called Cape Cooke. Between these two last-named capes, in a deep bay, he named an island Isle Nicholas.

Capes Linsey, Portland, Dorset, and Dorchester were named after the Lords Commissioners of the Admiralty,* Nicholas Island was called after the Secretary of the Admiralty, whilst two islands in the vicinity of Queen's Cape, were named respectively Sackfield and Crowe, after Sir Sackfield Crowe, late Treasurer of the Navy.

On the 27th September, only five days after reaching his furthest position, so little were his movements hampered by ice, he passed through the Strait and was off Resolution Island, and on the 31st October, the *Charles* reached England.

Captain Fox concludes his narrative in the following words:—"The 31, blessed be Almighty God, I came into the Downes, with all my men recovered and sound, not having lost one man nor boy, nor any manner of tackling, having beene forth near six months. All glory be to God."

Captain Fox's voyage, in spite of the sneers and sarcasms that have been levelled at it by modern writers, added greatly to the scant geographical knowledge that was then possessed of Hudson's Bay, Strait and adjacent waters, and whatever may be said of his conceit and quaintness, there is but little doubt that he was a skilful sailor, a keen observer, and an energetic and enterprising explorer.

I have given the narrative of this voyage, together with those of Hudson and Baffin, in some detail, because I regard these men as being essentially the pioneers of geographical discovery in Hudson's Bay, for they did more towards the exploration of that region, than has subsequently been performed by later navigators. I shall not allude at such length to the doings of their successors.

The merchants of Bristol, not to be behind those of London in their praiseworthy endeavours to accumulate wealth by geographical discovery, also despatched a ship named the *Maria* of 70 tons, for the purpose of searching for the North-west Passage through Hudson's Strait. She was commanded by Captain James, and sailed out of the Severn on the same day that Captain Fox left the Thames in the *Charles*, namely the 3rd of May, 1631.

Of the antecedents of Captain James, little or nothing is known, prior to his being selected by the Bristol merchants to command this expedition. He does not, however, appear to have been a man fitted for the conduct of such an enterprise, being, from all accounts, devoid of skill, energy, and judgment. After being nearly destroyed by the ice off Cape Farewell on the 6th of June, the *Maria* reached Resolution Island on the 24th, but in consequence of striking on a rock, and being much hampered

* In 1628 the office of Lord High Admiral had been placed in commission, for the first time in our history.

by ice, it was not until the middle of July that the vicinity of the Digges Islands was reached.

The account of getting the ship off the rock is thus described: "We made fast cables and hawsers aloft to the masts, and so to the rocks, straining them taut with our tackles; but as the water ebbed away, the ship was turned over, that we could not stand in her. Having now done to the best of our understandings, but to little purpose, we went all upon a piece of ice, and fell to prayer, beseeching God to be merciful unto us." The following general advice to those navigating Hudson's Strait is gratuitously given by Captain James, by which his capacity as an explorer may fairly accurately be gauged: "I advise no one to come near those dangerous shores, for fear he lose his ship." Comment on such advice is unnecessary.

On the 16th of August they were off Port Nelson, whence steering a south-easterly course they sighted a cape on the 2nd of September in latitude 55° 5′, which was named Cape Henrietta Maria.

Prior to this, on the 30th, as already related, they sighted and communicated with the *Charles*, under Captain Luke Fox, with whom they remained in company for seventeen hours.

On the 12th of September they again contrived to run the ship on shore off the coast of America, in latitude 52° 30′. Eventually, after numerous perils, the result of ignorance and inexperience, they reached an island, subsequently named Charlton Island, in latitude 52°, where they decided upon wintering.

The hardships and privations that were endured by these unfortunate people were most appalling. Nothing seems to have gone right, and a most dismal account is given of the manner in which the winter was passed. Indeed the whole narrative is replete with complainings of the sufferings they were subjected to.

As it was impossible, from the position and leaky condition of the ship, to live on board, a house was constructed with much labour and difficulty on shore, in which they passed the winter, but even here their troubles ceased not, and on one occasion, through negligence or carelessness, their house was nearly destroyed by fire.

A curious story is related of the gunner of the ship, who was so seriously injured on the 21st of August as to necessitate the amputation of one of his legs. The poor man lingered until the 22nd of November, when he died, and was committed to the deep at some distance from the ship. On the 18th of May, six months after the committal of the body to the sea, the master who, it is related, "was looking about him, discovered some part of our gunner under the gun-room ports. The 19th, in the morning, I sent men to dig him out. He was fast in the ice, his head downwards and his heel upwards, for he had but one leg; and the plaister was yet at the wound. In the afternoon they had digged him clear out, and he was as free from noisomness as when we first committed him to the sea. This alteration had the ice, and water, and time only

wrought on him, that his flesh would slip up and down upon his bones like a glove on a man's hand."

In February, to add to their miseries, scurvy broke out, and reduced them all to a very helpless condition.

It is needless to follow them through all their sufferings during a long and hard winter; suffice it to say, that they succeeded in breaking out of winter quarters during the first week in July, and eventually, without any further adventures worth mentioning, they reached Bristol on the 23rd of October.

It would not be amiss to wind up the narrative of Captain James's expedition with the following quotation from his journal, and the accompanying lines, which were inspired by his poetical muse on visiting, for the last time, the graves of the men belonging to the *Maria*, who died during the winter at Charlton Island.

"July, 1632. I (Captain James) went to take a look at our dead. I uttered these lines, which, though they may procure laughter in the wiser sort, they yet moved my young companions with some compassion :—

"I were unkind, unless that I did shed
Some tears before I part from our dead.
And when my eyes be dry, I will not cease
In heart to pray their bones may rest in peace.
Their better parts (good souls) I know were given
With an intent they should return to Heaven.
Their bodies they spent to the last drop of blood
Seeking God's glory and their country's good.
So have they spent themselves, and here they lie—
A famous mark of our discovery.
We that survive, perchance may end our days
In some employment meriting no praise,
And on a dunghill rot, where no man names
The memory of us, but to our shames.
They have outlived this fear, and their brave ends
Will ever be an honour to their friends.
The winter's cold that lately froze our blood
Now, were it so extreme, might do this good,
To make these tears bright pearls which I would lay
Tomb'd safely with you, till Doom's fatal day.
So grieved, I kiss your graves and vow to die,
A Foster-father to your memory.

"We cast from shore that afternoon, and I never saw that dreary island of our discovery again."

Captain James's narrative, which was published at some length, has very aptly been described by Sir John Barrow as a "book of lamentation and weeping and great mourning"—a better description of it is impossible. The result of the expedition in a geographical, or other scientific point, was practically nil; from first to last it was a sadly mismanaged affair, and need not further be alluded to.

The failure of Fox and James to discover a North-west Passage seems, for the time, to have been accepted as conclusive evidence of the non-existence or, at any rate, the impracticability of a route being found through Hudson's Bay to the Pacific, and no further attempts were made until the year 1668, when the enterprising and energetic Prince Rupert, supported by a number of wealthy men, obtained by charter from King Charles II. the rights and privileges over all lands that might be discovered in the neighbourhood of Hudson's Bay. This charter is dated 2nd May, 1669, and, although its contents have recently been questioned, it practically remains in force at the present day. It was granted to the "Governor and Company of Adventurers of England trading in Hudson's Bay," and the formation of this company was, in reality, the nucleus of what afterwards became the rich and powerful corporation known as the Hudson's Bay Company. By the terms of this charter, the company obtaining it became possessed of that enormous tract of country which has been known generally as the Hudson's Bay Territory, and which stretches from the Atlantic to the Pacific, and from the shores of the Polar Sea to the 50th parallel of latitude. It was given to the Company and their successors in perpetuity, for "the sole trade and commerce to Hudson's Bay and Straits, with territorial rights and jurisdiction over all the land and countries on the coasts and confines of the same, which were not actually possessed by the subjects of any other Christian prince or state, to be reckoned and reputed as one of the British plantations or colonies in America under the name of "Rupert's Land."

It is, I believe, an incontrovertible fact that France, long before the issue of this charter, in about 1598, laid claim to those vast regions in the immediate neighbourhood of Hudson's Bay, and letters patent were granted by Henry IV. of France to a M. de la Roche, appointing him lieutenant-governor over the countries of Canada, Hochelaga, Labrador, and the river of the great bay of Norrembegue, &c., and the country was in actual occupation by the French, but there is no record of their having regularly established themselves on the shores of Hudson's Bay, although the region was undoubtedly visited, and traversed in various directions, by French voyageurs.

Mr. Fitzgerald, in his work on the Hudson's Bay Company, says that the French Fur Company of Quebec, established forty years before the Hudson's Bay Company, appears to have traversed the whole of the country which the Hudson's Bay Company now claims. For many years, when the English Company never ventured to leave the shores of the Bay, when their establishment consisted of only four or five insignificant stockaded posts on its shores, the voyageurs of the French Company were travelling over the whole of the country, north-west of the Canadas as far, it is said, as the Saskatchewan river.

Among these adventurous travellers was an enterprising Frenchman

named de Grosseliez, who, foreseeing the great advantage that might be gained by trading on a large scale with the natives of the Bay region, prevailed upon some of his countrymen to join with him in the equipment of a ship, provided with the necessary articles for trade, in which he would himself proceed to Hudson's Bay from Quebec. He appears to have experienced but little difficulty in sailing through the Strait, although it was somewhat late in the season before he reached the Nelson river. Here, whilst looking for game and searching the country generally, some of his men reported that they had discovered an English settlement, which M. de Grosseliez immediately determined to attack and capture.

On approaching the spot indicated, a small solitary hut was seen, in which were found half-a-dozen starving wretches on the verge of death, suffering from disease and famine.

The tale they had to relate was a piteous one. They stated that they had formed part of the crew of a Boston vessel, and that they had been despatched from her for the purpose of selecting a suitable place in which the ship could be secured for the winter. Whilst engaged on this duty, the ship had been blown off by a storm, and had not since been seen by them. They were left with hardly any provisions, and would undoubtedly have perished, had they not been rescued and succoured by the French.

Having explored the country in the neighbourhood of the Nelson river, de Grosseliez sailed for Canada, leaving his nephew and five men to pass the winter in Hudson's Bay. Being unsuccessful in his attempt to induce his countrymen, either in Canada or in France, to co-operate with him in his endeavours to establish a settlement on the shores of Hudson's Bay (the account given of the climate by Captain James being in all probability the principal cause of the indifference displayed), he, at the instigation of Mr. Montague, the English Minister at that time in Paris, sought an interview with Prince Rupert, who immediately engaged him to go out in one of His Majesty's ships, not only with the view of trade, but also with the object of discovering a North-west Passage.

The ship selected for this service was the *Nonsuch*, and Captain Zachariah Gillam was appointed to the command, with instructions to take de Grosseliez to Hudson's Bay, and to explore to the northward. Sailing in the summer of 1668, they claim to have reached the latitude of 75° in Davis's Strait, but there is nothing that I can find on record to substantiate such a statement.

The *Nonsuch* then passed through Hudson's Strait, and entering the bay, sailed to the southward, where she passed the winter at the south extreme of James's Bay, in Rupert's river. Here Fort Charles was established. This appears to be the first English fort, or settlement, formed in Hudson's Bay, and was, therefore, the beginning of the

Hudson's Bay Company. Captain Gillam may, in consequence, be regarded as the pioneer and founder of what eventually became an influential and powerful corporation. Little else appears to have been done by the expedition, and the *Nonsuch* returned to England in 1669.

From this date, for a period of fifty years, no interest appears to have been taken in geographical research in the region of Hudson's Bay, although the Company's ships were frequently employed in making the voyage from and to England. In the year 1719, at the instigation of a Mr. Knight, an official in the Hudson's Bay Company, an expedition consisting of two ships, named the *Albany* and *Discovery*, was despatched by the Company, partly for the purpose of discovering a North-west Passage through the Straits of Anian to the South Sea, but more, I think, with a view of discovering a rich mine of native copper, which the Indians reported to exist to the northward.

Captains Barlow and Vaughan were appointed, respectively, to the command of the *Albany* and *Discovery*, but they were also accompanied by Mr. Knight, who, it is said, was, at the time, nearly eighty years of age.

They sailed from Gravesend in 1719, but as three years elapsed without receiving any tidings of them, the Hudson's Bay Company despatched one of their ships, the *Whalebone*, in quest. She sailed from Churchill on the 22nd June, 1722, under the command of Captain John Scroggs. There is but a very brief account of the proceedings of this cruise extant. The ship appears to have reached the latitude 64° 56′, when they anchored under the lee of a promontory, to which the name of Whalebone Point was given. The land from this point trended to the southward of west, and the rise and fall of the tide was observed to be 30 feet. They do not appear to have troubled themselves very much about searching for their missing countrymen, their minds apparently being more fully occupied in endeavouring to discover the locality of a rich copper-mine, the existence of which had been brought to their knowledge by some Indians. They returned to Churchill the same year, without having achieved anything of interest or importance.

It was not until 1767 that the melancholy fate of those in the missing ships *Albany* and *Discovery* was ascertained.

During that year, some of the boats of the Hudson's Bay Company were engaged in the whale fishery as far north as Marble Island, when they discovered, in a harbour near the east end of the island, a number of guns, anchors, and other ships' stores. The ruins of a house were also found, whilst the remains of the hulls of two ships were seen under water. From the articles found, and also from information obtained from the Eskimos, but little doubt remained that these were the vessels commanded by Barlow and Vaughan, who, with their unfortunate crews, had all perished from scurvy or starvation.

The next important expedition that was despatched for the exploration of Hudson's Bay, was that commanded by Captain Middleton, which left

England in 1741. It consisted of the *Furnace* bomb, and the *Discovery* pink, the latter commanded by Mr. William Moor.

The despatch of this expedition was due entirely to the exertions of a Mr. Arthur Dobbs, who prevailed on the Admiralty to allow the *Furnace*, a ship of the Navy, to be appropriated for the service. The first winter, through some unavoidable detention, was passed at Churchill. Thence they sailed on the 1st July, 1742, and proceeding northwards, sailed up the Welcome, until they reached the entrance of the Wager river in latitude 65° 23′. After vainly searching for a passage for some days, they stood to the southward and eventually sailed for England. This expedition, like so many of the preceding ones, was also barren of results. On its return to England a long and acrimonious controversy was carried on between Mr. Dobbs and Captain Middleton, regarding the direction of the tides and other matters, the former accusing Captain Middleton of having acted treacherously, and for having given a false account of his proceedings; and even for having been largely bribed by the Hudson's Bay Company *not* to make any discoveries.

The Admiralty called on Captain Middleton to reply to these charges, which he did at some length, but he does not appear to have done so to the satisfaction of their lordships.

In the year following, viz. 1743, an Act of Parliament was passed, offering a reward of 20,000*l.* for the discovery of a North-west Passage.

Stimulated by this reward, a company was formed which succeeded in raising, by subscription, a sum of 10,000*l.*, divided into 100 shares of 100*l.* each.

Two vessels were purchased, the *Dobbs* galley, of 180 tons burden, and the *California*, of 140 tons. Captain William Moor, who had sailed with Middleton in the previous expedition, was selected for the command, and Captain Francis Smith was appointed to the *California*.

The account of this expedition is related by Mr. Henry Ellis, who, although a seaman, accompanied it in the capacity of agent. Elaborate instructions were drawn up for their guidance, and they sailed from Yarmouth on the 31st May, 1746. Resolution Island was reached on the 8th of July, and although they encountered but very little ice at the entrance to the Strait, their progress was subsequently considerably hindered by it. On the 2nd of August they passed Digges Islands, and then shaped a course for the west side of the Welcome, but being under the impression that the season was too far advanced for further exploration, they proceeded to York Factory, which they reached on the 26th August.

Here, in spite of the inhospitable protestations and incivility, to use no harsher term, of the Hudson's Bay officials, they passed the winter, having hauled the ships into Hayes river. Huts were built on shore in which the officers and men were accommodated. During the winter they were attacked with scurvy, produced in all probability by an inordinate

use of spirituous drinks, for they appear to have been only too well supplied with brandy and beer.

On the 24th June, the ships left York Factory, and proceeded to Marble Island, where they remained comfortably at anchor, whilst a boat, specially fitted for the purpose, was sent to explore, but without any important results. Further exploration was relinquished in August, and the ships proceeded to England, passing Resolution Island on the 9th of September, without hindrance from ice in the Strait.

Regarding the alleged dangers and difficulties in navigating Hudson's Strait, Mr. Ellis writes—"We know that this navigation is far from being so perilous, as it is represented; and it will be shown that there are very good grounds to expect that this passage (viz. the North-west Passage) is not either narrow or encumbered with ice, but may be both passed and repassed in the compass of the same summer."

Captain Middleton also makes light of the difficulties of getting through the Strait; he writes, "We make no account of conquering the current, fogs, &c., in Hudson's Bay and Straits. As to observing the latitude in foggy seasons, I have seldom missed two days together."

In 1748 a Mr. Wales was sent to Churchill by order of the Royal Society.

He reached Resolution Island on the 23rd of July, and saw many icebergs, but had no difficulty in getting through the Strait, and was actually off Cape Churchill on the 7th August. He sailed from Churchill on the same day the following year, and reached England on the 11th of October. He was only nine days going through the Strait, during which time they met with no ice to interfere with their progress, but were much delayed by contrary wind and calms.

During the whole of the eighteenth century, vessels belonging to the Hudson's Bay Company made annual voyages to and from England, to York and Moose Factories. It was very rarely that they failed to make the voyage, and but few of their ships were lost.

One of the masters in the Company's service, a Captain Coats, who had been many years employed in the service, wrote a very practical and interesting treatise in 1750, which he named the Geography of Hudson's Bay. This has, within the last few years, been reproduced by the Hakluyt Society. It contains very clear and concise sailing directions for vessels navigating the Strait and Bay.

In 1791, at the instance of the Governors of the Hudson's Bay Company, a vessel called the *Beaver* was fitted out, and sailed from the Thames on the 2nd of May, with the object of discovering the North-west Passage, round the north-eastern extremity of America, by proceeding up the Welcome. The command was entrusted to a Mr. Duncan, a master in the Royal Navy. He is reported to have encountered much ice in Hudson's Strait, which so delayed him that it was not until the 5th of September that he reached Churchill, where he passed the winter.

They left on the 15th July the following year, and sailing up as far as Chesterfield Inlet returned again to Churchill in August, the crew having mutinied and refused to go any further. It is said that they were encouraged in their rebellious attitude by the first mate, who was an officer of the Hudson's Bay Company.

This was the last expedition undertaken for geographical discovery in the region of Hudson's Bay, until the one sent out by the English Government in 1821, commanded by the late Sir Edward Parry. This was followed in 1824, by that under Captain Lyon in the *Griper*, and, twelve years after, by the one despatched under the command of the late Sir George Back.

The events of these three memorable voyages are matters of history, and are so well known that it would be superfluous on my part even to give, in the very briefest detail, an outline of the work performed by them. I shall therefore content myself with a simple reference to what has been written by the distinguished officers who commanded those expeditions as bearing on the navigation of Hudson's Strait.

The ships under Sir Edward Parry, it will be remembered, were the *Fury* and *Hecla*. Much ice was encountered at the entrance of Hudson's Strait on the outward journey, and nearly the entire month of July was occupied in getting through; but the delay was occasioned as much by adverse winds and calms as by the ice. On the 21st July, Parry writes, "bodies of ice became less and less numerous as we advanced up the Strait from Resolution Island, and none were seen after we had proceeded a few leagues beyond the Upper Savage Islands." On the 25th, he reports "the sea almost free from ice." On the 26th, "saw no ice this day, except a few streams here and there." On the 27th and 28th he writes:—"Ice in great quantities, but the pieces so loose as easily to allow the passage of a ship with a free wind. This ice was so honeycombed and rotten that it appeared in a fair way of being entirely dissolved in the course of a few weeks." This was, in all probability, ice that had drifted down through Fox Channel? The weather on the whole was fine and clear, only four foggy days being recorded during the month of July.

During the return journey of the *Fury* and *Hecla*, they were only five days, namely, from the 17th to the 23rd September, passing through the Strait, during which time no ice whatever was to be seen.

Regarding the best time for navigating the Strait, Sir Edward Parry says:—"Long experience has brought those who frequent this navigation to the conclusion that in most seasons no advantage is to be gained by attempting to enter Hudson Strait earlier than the first week in July, the annual disruption of the ice, which occupies the upper and middle parts of the Strait, being supposed not to take place till about this time. In the course of our single year's experience in these parts, we have seen nothing to recommend a practice different from that at present pursued

by the ships of the Hudson's Bay Company." I cordially concur with every word in this quotation, for it exactly corresponds with my own experience and my own views; but the fact must not be overlooked that this advice is addressed to those who attempt the navigation of the Strait in sailing ships. Steam has made a great revolution in ice navigation. A well-found steamer is able to make her way with ease through the ice in Hudson's Strait in June and July, when a sailing ship would be hopelessly beset, and incapable of pushing on. With regard to the practice pursued by the ships of the Hudson's Bay Company, alluded to by Sir Edward Parry, it stands to reason that the captains of those ships would naturally delay their passage across the Atlantic, so as not to reach the Strait before July or August; for they were well aware that every extra day spent on the passage was a day nearer the disruption of the ice. Their experience told them that a policy of waiting was the wisest, when the chances would be more in their favour of getting through without hindrance from ice.

In 1824 Captain Lyon, in the *Griper*, passed through the Strait in fourteen days, namely, from the 6th to the 20th of August. He sighted some loose heavy ice off Resolution Island, but otherwise experienced no difficulty in getting through. On his homeward journey no ice whatever was seen in the Strait, and he averaged, in his dull old bluff-bowed sailing ship, 150 miles per diem, as he passed through, from Cape Wolstenholme to Resolution Island.

During Sir George Back's memorable and eventful voyage in the *Terror*, in 1836, he encountered much ice in the Strait. But this appears to have been an exceptionally bad ice year. Still he was not more than a fortnight in getting through, namely from the 1st of August, when he was off Resolution Island, to the 14th, when he passed Nottingham Island. His course was then directed up Fox Channel, where his ship was closely beset by heavy ice, in which, helplessly drifting at the mercy of the winds and currents, he was compelled to pass the winter. During a period of six months, the ship drifted 234 miles in a generally south-eastern direction. It is almost impossible for us to conceive, much less to describe, the anxiety that must have been experienced by those on board the *Terror* during those long dark months, when officers and crew were, it may truly be said, momentarily expecting the destruction of their floating home. It was only by the merciful dispensation of an all-wise and protecting Providence that their ship survived the terrible injuries that were inflicted on her by the ice, and she succeeded in making one of the most miraculous voyages on record across the Atlantic. The principal object of this expedition was the delineation of the northern boundary of the North American Continent, or, in other words, to connect the discoveries of Sir John Franklin from Point Turnagain, to those of Sir Edward Parry in Prince Regent's Inlet, but this was unfortunately frustrated by the ice in Frozen Strait.

Although the amount of geographical information obtained was not very great, yet the voyage was exceedingly instructive as showing the general drift of the ice down Fox Channel into Hudson's Strait.

The account of the *Terror's* voyage home embraces one of the most thrilling stories of sea adventure that has ever delighted the readers of this country. When all hope of saving the ship and the lives of the crew had almost died out in the breast of the Captain, the coast of Ireland was sighted; Captain Back then succeeded in running the *Terror* on shore off Buncrana, in Lough Swilly. The men were harassed and worn out by their exertions in keeping the ship afloat, and the vessel herself, leaking like a sieve from the injuries she had sustained in the ice, was only held together by the stream cable being passed round the after part, and so binding her timbers and planking together.

This was the last Government expedition, having geographical research solely for its object, that entered Hudson's Bay. But its waters have been, year by year, navigated by the ships of the Hudson's Bay Company. These vessels were annually despatched from England to York and Moose Factories, at the rate of two, and sometimes three, per annum.

They rarely failed to reach their destinations, for arranging, as they invariably did, to reach Hudson's Strait on their outward voyage in about the first week of August, they experienced but little difficulty from the ice. On their return voyages in September and October, they always found the Strait comparatively clear.

I have in my possession an official record of the voyages out and home, of the Hudson's Bay Company's ship, *Prince Rupert*, for a period of eleven consecutive years, namely, from 1835 to 1846 inclusive. I find that the average time of getting through the Strait, on the outward voyages during this period (and it must not be forgotten that the Strait is 500 miles in length) was 16 days. The longest time was 31 days (probably an exceptionally bad ice year). The shortest time was eight days; the delays in getting through the Strait were invariably caused by calms and adverse winds, and not by the ice. On the homeward passages, no difficulty was experienced from ice in the Strait, and the vessels usually reached London in about five weeks after leaving York Factory. The earliest date for sailing from York Factory was the 6th September, and the latest the 3rd of October. In the latter case the *Prince Rupert* was 38 days on the passage to London; so that it is impossible she could have had any serious detention from ice in the Strait.

It must be remembered that this vessel, and all others then employed by the Hudson's Bay Company, were sailing ships, dependent entirely on wind as the motive power by which progression could be made. Without wind they were helpless; with a foul wind their progress was of course proportionately slow. Wind, therefore, was a matter of great importance in those days, when a vessel was endeavouring to make way

through fields of loose ice; for when the wind falls, the ice invariably loosens, or, as the technical expression is, "goes abroad;" But in such a case, as there is no wind, the unfortunate sailing vessel, being deprived of its only propelling force, is unable to take advantage of the ice being loose to push on. On the other hand, when a breeze springs up, which on ordinary occasions would possibly enable her to make good way, the wind has the effect of packing the ice, thus rendering progress nearly impossible.

Steam has now, however, effected a complete revolution in ice navigation, and the most advantageous time for pushing on is, of course, in calm weather, when the ice is loose. Under similar conditions a sailing vessel would be utterly helpless. It is, therefore, only reasonable to infer that what has been performed regularly, and year after year, for more than 200 years, by wretchedly equipped and ill-found sailing ships, can be accomplished with greater regularity and certainty, by well-found steamers, specially constructed for ice navigation and provided with powerful machinery.

A channel which has been navigated for 270 years, first by the frail little fly-boats of the seventeenth century, then by the bluff-bowed, slow-sailing, exploring vessels of Parry's days, and for a long period by the Hudson's Bay Company's ships, cannot be very formidable, and if sailing ships can annually pass through it, *à fortiori*, steamers will find less difficulty in doing so. But it would, of course, be necessary that such steamers should be specially built and equipped for the service, and it is desirable that despatch should be used in making the voyage.

The nature and consistency of the ice in Hudson's Strait (which will be more fully described further on) are such that, with an efficient steamer, the passage could be accomplished with very little delay or difficulty.

This being the case, it is not surprising to hear that the people of the North-west are to have a seaport on the shores of Hudson's Bay, and to secure the construction of a railroad to connect such a port with Winnipeg or some other equally convenient depot on the newly established line of the Canada and Pacific railroad.

The achievement of such an undertaking would result in shortening the distance that the produce of the country, destined for exportation, would have to be transported by one-half! As the cost of transport by rail is governed by the distance that goods, or passengers, have to be conveyed per mile, it will be at once understood that if the mileage is reduced by one-half, the cost of conveyance will also be diminished in the same proportion. It has been estimated that the result of the construction of a railroad from Winnipeg to Hudson's Bay, would be a clear gain to the farmers and producers of the North-west, of about 3*l.* per head on all cattle exported, and 5*s.* upon every quarter of grain sent for shipment.

These are large items in the profit and loss accounts of those immediately concerned; therefore it is not surprising to hear that the feeling in Manitoba is unanimous in the desire for the immediate construction of a railroad.

What, then, is to prevent the realisation of their wishes, if such pecuniary benefit to all concerned is to be derived from the undertaking? There must be some good reason for not carrying out the work at once, otherwise it would long, ere this, have been commenced.

The serious, in fact the only, obstacle to the establishment of a seaport in Hudson's Bay is, and has been, the supposed formidable character of the ice that it was thought would have to be encountered in Hudson's Strait, and the limited duration of the navigable season.

These were the knotty questions that had to be solved satisfactorily, before action in the desired direction could be taken.

Monopolists, and persons interested in other routes, represent the difficulties offered by the ice in Hudson's Strait as fatal to the success of the project. The question is a purely geographical one, its solution depends on physical considerations, and the controversy is, therefore, a clear gain to the science of geography.

In order to obtain full and accurate information on these important points, the Dominion Government of Canada, with commendable energy, and a praiseworthy determination to solve the long-disputed problem as to the practicability of navigating the Strait annually, resolved upon despatching a vessel for the purpose of establishing stations on both sides of Hudson's Strait, at which continuous daily observations could be taken and recorded on the weather, tide, temperature, condition and movements of the ice, and other facts connected with the meteorology of that region, for a period of at least twelve consecutive months.

With these objects in view, the *Neptune*, a steamer that had been built for, and employed in the sealing trade, was chartered and despatched in the year 1884.

She was in every way admirably adapted for the work she was required to perform, having been specially constructed for ice navigation.

Her voyage was eminently successful; she experienced but little difficulty in passing through the Strait, and she succeeded in establishing stations at the following places:—One named Port Burwell near Ungava Bay, on the south side of the Strait, close to the entrance. Another in the vicinity of the Upper Savage Islands, at Ashe Inlet. Another was immediately opposite, on the south side of the Strait, called Steepart Bay. The fourth was on Nottingham Island; and a fifth was established on one of the Digges Islands, at the opening into Hudson's Bay.

An observer, with a couple of attendants, was placed in charge of each of these stations, with a supply of provisions to last over twelve months.

In the official report of the voyage of the *Neptune*, whilst engaged on

this service, her commander states that had he been making the passage direct to Churchill, instead of coasting and visiting specially-selected places on both sides of the Strait, he is of opinion that he would not have been delayed by ice for more than about forty-eight hours! On the homeward voyage there was no delay whatever in the Strait, no field ice having been encountered.

The *Neptune* can, I believe, fairly lay claim to the honour of having been the first steam vessel that has ever crossed the waters of Hudson's Bay.

On the return of the *Neptune* to Halifax, steps were immediately taken to secure the despatch of a vessel to Hudson's Strait the following year, for the purpose of visiting and relieving the stations established there. In order to assist the Canadian Government in their praiseworthy endeavours to obtain reliable and accurate information regarding the navigation of the Strait, and we will hope also as a recognition of their appreciation of the service that was being carried out, the Imperial Government of England placed H.M. ship *Alert*, a vessel which had already gained a reputation for herself in Arctic research, at their disposal. She was officered and manned by the Canadian Government, and sailed from Halifax in the early part of June, 1885.

She reached the entrance to Hudson's Strait on the 16th June, but through some mismanagement, or want of experience in ice navigation on the part of those who were occasionally entrusted with the charge of the ship, she was allowed to be beset by the ice. No advantage appears to have been taken of her steam power to extricate her. In fact, the reverse seems to have been the case, for in the official report of this voyage we read that, instead of utilising the power that was at their disposal to release her from her imprisonment, they "banked the fires and left the ship to pull under a fore-topsail and foretop-staysail." I am simply quoting the official report!

The "pull," however, does not appear to have been in the desired direction, or, if so, it was misapplied, for we learn that shortly afterwards the stem of the ship was so seriously injured by coming into contact with the ice, that it was considered, not only desirable, but necessary to return to the southward, and they put into St. John's, (Newfoundland), in order to effect the requisite repairs.

These were, however, easily and speedily executed, and by the first week in August the *Alert* was again in Hudson's Strait. The next few days were employed in visiting the stations established the previous year, which was done without much difficulty, and on the 31st of the same month the *Alert* reached Port Churchill, having spent a few days at each station.

Her work being accomplished, she sailed for Halifax, meeting no ice whatever during the return journey, although it was the 7th of October before she was clear of the Strait.

The reports obtained from the different stations regarding the presence and conditions of the ice in the Strait, supplemented as they were by those received from the *Neptune* and *Alert*, were, on the whole decidedly satisfactory, in so far as they bore on the question of the safe navigation of Hudson's Strait during a certain period of the year.

In the following year, namely in 1886, it was again resolved by the Dominion Government to despatch the *Alert* to Hudson's Bay. But this time it was with the object of dismantling the stations in the Strait, and taking the observers back to Halifax, as it was considered that the work for which they had been engaged was accomplished.

By a fortunate accident I was able to avail myself of an invitation I had received to take a passage in the *Alert* during this cruise.

I considered myself very fortunate in having the opportunity afforded me of doing so, for it had long been my wish to visit Hudson's Bay, and I had almost decided upon accomplishing this object by travelling from Winnipeg by land and by canoe. The offer, therefore, of going in the *Alert*, which would enable me to make the passage of the Strait, as well as of the Bay, was too good to be refused, and I eagerly availed myself of it. There was only one stipulation, and that was that I should, in return for the passage offered, at the termination of the voyage, submit a report on the state and conditions of the ice, as observed by me, in Hudson's Strait, and my views generally regarding the practicability of the route as a commercial highway, and my opinion relative to the duration of the navigable season. I had no hesitation in acceding to these conditions.

I might observe that I was quite ignorant of the controversy that had been carried on for some time between those who were in favour of Hudson's Strait as a commercial route, and those who were opposed to it. I was untrammelled by orders or suggestions, and felt myself a free agent from whom a perfectly impartial and unbiassed opinion was expected.

Under these circumstances I joined the *Alert* at Halifax, and sailed in her from that port on the 23rd of June.

On the 5th July we reached the entrance of Hudson's Strait, where we were detained for four days, partly by thick weather and partly by loose streams of ice; but the latter were never packed sufficiently close to prevent even a slow steamer like the *Alert* from making fairly good progress. The ice that we encountered was of a soft brashy consistency, the greater part of it being honeycombed from the action of the water, and in an advanced state of disintegration. Whilst thus delayed at the entrance of the Strait, we observed the same curious commotion of the water that had been commented on by Davis, Parry, Back, and other navigators. Davis called it, on the globe of 1593, the "furious overfall." It is not easy to account for these turbulent eddyings and overfalls, unless they be caused by the rapidity of the water rushing over an irregular and rocky bottom. Frequently we would

see comparatively large pieces of ice being swept, with great velocity, in *opposite* directions, although in close proximity to each other. The ice, on these occasions, was evidently very much influenced by local forces, such as tides. So far as we were able to discover, the flood—or west-going—tide caused the ice to slacken, whilst a contrary effect appeared to be exercised on it by the ebb. From the 9th to the 11th of July scarcely any ice was seen, and a distance of over two hundred miles was accomplished in about thirty-six hours. This fact alone, without further comment, is in itself sufficient evidence to show how free the eastern part of the Strait was from ice; for the *Alert*, if driven at her full speed, could only steam about six knots an hour.

Early on the morning of the 11th of July we arrived off the station on the north side of the Strait, and anchored in a snug little bay at one of the Savage Islands called Ashe Inlet. The observers were found to be in perfect health, and they had spent a pleasant winter, having been well supplied with reindeer meat by the Eskimos. They informed us that the ice did not form in the Strait before December, and that the channel was perfectly free for navigation during the entire month of November. Game appeared to be plentiful in the neighbourhood of the station. Numerous herds of reindeer were met with during the winter, and hares were reported as abundant on an adjacent island; whilst bears, seals, and walrus were frequently seen.

After a brief stay at the Savage Islands, the *Alert* continued her voyage through the Strait, but her progress was so retarded by ice that it took her nine days to accomplish a distance of about three hundred miles. This slow progress was mainly caused by the absence of sufficient steam power to enable her to thread her way through the loose ice, and also by a want of vigilance in taking advantage of the diurnal and other movements of the ice to push on. A knowledge of ice navigation, like everything else, cannot be acquired at once. Practical experience, unceasing vigilance, and a happy knack of doing the right thing at the right moment, are essential qualifications for those seamen who desire to become successful ice-navigators.

The ice that we encountered in the western part of the Strait was somewhat different and heavier than the ice we passed at the eastern entrance. It was composed chiefly of small pieces, packed loosely together, appearing as if the floes, by some sudden, or even gradual convulsion, had been broken up into small pieces, and then drifted together into one large pack. This peculiar feature of the ice in Hudson's Strait is one that I have never observed in other parts of the northern seas, and it is worthy of consideration when the question of the practicability of navigating the Strait is under examination. For it is these innumerable small pieces that, in a great measure, deprive the pack of the power of seriously injuring any vessel that may be beset in it—for when any pressure takes place, the smaller pieces, being composed of soft brashy ice, act as

cushions between the ship and the larger floes, and thus protect the vessel from a violent squeeze or nip.

The greater part of this ice was, I think, formed in Fox Channel, whence it drifts down to the Strait after the disruption of the ice in the summer. Occasionally a few large floes were seen, some of which I estimated to be about half a mile in length, but a floe of this size was quite exceptional. The thickness of the floe ice was from 6 to 12 feet, but it was all more or less rotten, and advancing rapidly towards dissolution; some of the pieces were, apparently, of unusually deep flotation, but this was mainly due to their complete saturation by water, owing to their soft and brashy consistency.

A peculiar feature in connection with the heavier and larger floes that we met, was the irregularity and unevenness of their surfaces. A perfectly level floe of any extent, having a flat level surface, was rarely seen; they were usually crowned with a succession of excrescences resembling small hillocks. This gave me the impression that these floes were composed of innumerable small pieces of ice, which, having escaped dissolution during the preceding summer, had been cemented together into one large mass by the snow and frost of the succeeding winter—the mounds that we observed being the hummocks that had formed round the edges of the smaller pieces, round which heaps of snow had accumulated, which in process of time had been converted into ice.

Many of these floes were discoloured by dirt and débris blown off from the shore; on a few of them I noticed thick mud adhering, evidence, in my opinion, that they were formed in the immediate neighbourhood of land, and did not, therefore, form part of the ice that had been made in the Strait during the winter. This heavy ice that we encountered had probably drifted down from Fox Channel, where large thick floes are known to exist.

No icebergs were seen to the westward of the Savage Islands, which seems to show that all those we passed to the eastward and at the entrance of the Strait had floated down from Davis Strait, or, at any rate, were the produce of glaciers north of Resolution Island.

During the time that we were in the Strait, the weather was generally fine, the average temperature being about 35° Fahr., although on some days the thermometer would rise to 50°; but again, on others, it would fall as low as 20°. The prevailing wind was from the westward, but from whatever direction it blew, it appeared to have but little effect on the movements of the ice, which were invariably erratic and uncertain, and governed by no regular appreciable laws. When we have more accurate information regarding the tides in Hudson's Strait, further light will, in all probability, be thrown on the movements of the ice, tending to simplify navigation.

After being in the ice for upwards of eight days, the *Alert* arrived at Digges Island (where one of the observatories had been established) on

the 20th July. This island, which forms a leading feature in the story of Hudson's voyage, consists of bare hills of gneiss, rising to a height of about 500 feet. The hills are intersected by broad valleys, carpeted with moss and coarse grass. The vegetation compares very unfavourably with that of some of the small islands on which I have landed off Novaya Zemlya, and which are in a much higher latitude. On the coasts of the latter the southern current warms the air and produces a comparatively luxuriant flora, while the former is exposed to cold Arctic streams.

After leaving the Digges Islands, where a few days were spent in overhauling the machinery of the ship, &c., the open water of Hudson's Bay was reached, and from that time, with the exception of passing through a few loose streams of broken-up stuff, no ice was seen. The *Alert* dropped anchor in Churchill Harbour on the 29th of July, without encountering any further difficulties from the enemy with which she had for ten days been contending.

From Churchill the *Alert* proceeded to York Factory, where I left her, travelling on to Winnipeg by canoe.

On her return passage through Hudson's Strait the *Alert* revisited the different stations without experiencing any difficulties from the ice, and having embarked the observers and their attendants and dismantled the stations, she returned to Halifax.

The result of all the experience gathered from voyages during two centuries, and from more recent observations at the stations, is that Hudson's Strait is perfectly navigable and free from ice in August and later in the season. It must not be forgotten that the passage of the Strait has been successfully accomplished nearly every year for the last 200 years, and the vessels that have been employed on this service have been ordinary sailing ships, dependent entirely on wind and weather. It is very rare indeed that they have failed to get through, and still more rare that any of them have been destroyed by the ice.*

The percentage of losses by shipwreck of those vessels that have been employed in both mercantile and exploratory service in Hudson's Bay, is far less than would have to be recorded in a like number of ships engaged in general ocean traffic. I am not far wrong in saying that since the keel of Hudson's good ship ploughed the waters of the Strait, the passage has been made over 500 times, whilst the losses due to the ice might be summed up on the fingers of one hand, and some of these losses were due to causes with which the ice had nothing to do. For instance, the recent loss of the *Cam Owen* was in no way connected with ice.

It must not be forgotten that the ships employed on the service were

* According to the official records of the Hudson's Bay Company, it appears that Moose Factory, at the south extreme of Hudson's Bay, has been visited annually by a ship since 1735, with but one exception, namely, in 1779, when the vessel for once failed to achieve the passage of the Strait.

ROYAL GEOGRAPHICAL SOCIETY.

SUPPLEMENTARY PAPERS.

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL, AND EDITED BY THE ASSISTANT SECRETARY, 1, SAVILE ROW.

Volume II.

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1889.

LONDON:

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED,

STAMFORD STREET AND CHARING CROSS.

CONTENTS.

PART I.

PAGE

I. Exploration in Southern and South-western China. By Archibald R. Colquhoun. (*With Maps.*) 1

II. Bibliography and Cartography of Hispaniola. By H. Ling Roth 41

III. Explorations in Zanzibar Dominions. By Lieut. Chas. Stewart Smith, R.N. (*With Maps.*) 99

PART II.

A Bibliography of Algeria, from the Expedition of Charles V. in 1541 to 1887 127

PART III.

I. On the Measurement of Heights by the Barometer. By John Ball, F.R.S., etc. 431

II. River Entrances. By Hugh Robert Mill, D.Sc., F.R.S.E., of the Scottish Marine Station 473

III. Mr. J. F. Needham's Journey along the Lohit Brahmaputra, between Sadiya in Upper Assam and Rima in South-eastern Tibet. (*With a Map*) 485

PART IV.

I. Bibliography of the Barbary States. Part I. Tripoli and the Cyrenaica. (*With a Map.*) By Sir R. L. Playfair, K.C.M.G., etc. 557

II. Hudson's Bay and Strait. By Commodore A. H. Markham, R.N. . 615

Index to Vol. II. 661

not only, as I have said before, sailing vessels, but they were also small, frail, and but indifferently found and equipped. Steam has now robbed ice-navigation of many of its difficulties and dangers; and it is only fair for us to assume that, with the facilities and appliances that science has since revealed to us, we can, in these days, achieve with greater ease and celerity, and with more assured certainty, as much as was accomplished by Hudson and Baffin, by Button and Luke Fox, and others, in their rude and poorly-equipped fly-boats, more than 200 years ago.

The vessels, however, to be employed on such a service should be specially constructed to resist an ordinary ice-pressure, and should be provided with sufficient power to be able to steam from ten to twelve knots at least. We, in the *Alert*, were frequently detained for many consecutive hours at a time, for want of sufficient power to propel the ship through loose streams of ice, which an ordinary steamer would have had no difficulty in penetrating. It is necessary that all vessels employed in ice navigation should be strengthened, especially in the bows, not so much for the purpose of resisting the pressure of the ice, if beset, as to repel the severe blows which must occasionally be inflicted by unavoidably striking unusually heavy pieces, whilst threading their way through a stream of ice.

In conclusion, I would remark that if the railroad from Winnipeg to Hudson's Bay becomes *un fait accompli*, there is but little doubt that the terminus of the line should be at Churchill, and not at York Factory as has been suggested, notwithstanding that the length of the line would have to be increased by about fifty miles through an unproductive country.

Churchill possesses a fine natural harbour, perfectly land-locked and protected from all winds, and is admirably adapted for commercial purposes—piers, wharves, &c., being easily constructed.

York, on the other hand, has no harbour; is a perfectly open roadstead, exposed to all winds; and in the evênt of a north-east gale it is an anchorage from which ships would be compelled at short notice to put to sea. The anchorage is also some eight to twelve miles, according to the draught of the ship, from the shore.

There is no comparison between the fitness and adaptability of the two places for the terminus of the railway.

I sincerely trust that the ensuing year will see the question of the practicability of navigating Hudson's Strait solved, by the construction of a railroad from Winnipeg to Port Churchill. This is really the only practical solution of the difficulty, and the only way this hitherto vexed question can be settled.

The case then can be very briefly summed up as follows: If sailing ships have annually taken the furs and other merchandise of the Hudson's Bay Company through the Strait for the last two centuries. *à fortiori* it may be looked upon as certain that powerful steamers will

be able to do the same for the produce brought to the west coast of Hudson's Bay by a railway from Winnipeg.

The establishment of new routes for commerce is always a gain to the science of geography. In some cases new regions have to be discovered and explored. In others, the physical aspects of an already known region must be more carefully studied, and many points of interest relating to the action of climate, or of winds and currents, may be ascertained. The proposed Winnipeg and Hudson's Bay Railroad is a striking instance. The objections of opponents to the route have had to be carefully examined. All former experience had to be collected, maturely considered, and passed in review. Observatories had to be established at several points, to make certain whether the historical records actually coincided with physical facts as they now exist. The route itself had to be sailed over and explored. All these various researches have been as great a gain to geography as to commerce. They have enriched our science with a fresh stock of information, have revised previous conceptions, and confirmed, or rejected, as the case may be, the theories and views which may, from time to time, have been put forward. From this point of view, and from this point of view alone, can commercial or political questions receive consideration here. The study of the Hudson's Bay route involves a problem for which physical geography alone can furnish a solution; and on these legitimate grounds I have ventured to submit it for the consideration of our Society. My labours will be more than rewarded if I have succeeded in my endeavour to give a new point of interest to a region which, although already well known, is exceedingly interesting, and is the direct road to unknown parts of the earth.

If the undertaking is carried out and brought, as I have no doubt it will be, to a successful issue, I shall feel that my trip to Hudson's Bay has not been either labour or time thrown away; and I shall feel myself amply rewarded for a journey that has not been unattended by certain hardships and privations, by the knowledge that I have been instrumental in assisting in the carrying out of a great work that cannot but be beneficial to our brethren residing on the opposite side of the Atlantic, and therefore an undertaking in which we, on this side, should feel deeply interested.

INDEX.

A.

A—K, Pandit, journey along the Brahmaputra, 487, 498
Alert, the, voyage to Hudson's Bay, 654, 655
Algeria, Bibliography of, by Sir R. Lambert Playfair, 129 *et seq.*
——— ——— Index of Authors to, 410 *et seq.*
——— ——— Index of Subjects to, 397 *et seq.*
Almora to Chinar, decrement of temperature, 460
Assam, Letter from the Secretary to the Chief Commissioner of, to the Secretary to the Government of India respecting Mr. Needham's Journey, 488

B.

BACK, SIR GEORGE, voyage to Hudson's Bay, 650
Baffin, William, voyage to Hudson's Bay, 633, 634
Baleez, East Africa, position of, 111
Ball, John, On the Measurement of Heights by the Barometer, 433 *et seq.*
Barbary States, Bibliography of the, Part I. Tripoli and the Cyrenaica. By Sir R. Lambert Playfair, 559 *et seq.*
Barlow, Captain, voyage to Hudson's Bay, 646
Barometer, On the Measurement of Heights by the, by John Ball, 433 *et seq.*
Bauernfeind, Dr. C., on Barometrical Measurements, 440
Bebejia tribe, 502
Bell, Dr., on the uniformity of level of Hudson's Bay, 618
Belli, M., on Barometrical Measurements, 434
Bibliography and Cartography of Hispaniola, by H. Ling Roth, 41 *et seq.*
——— Algeria, 129 *et seq.*
——— Tripoli and Cyrenaica, 559 *et seq.*
Bondei country and people, 122
Bor Khamti tribe, 532
Brahmaputra, cane bridges on the, 516, 530
Brümson, Mishmi chief, 519
Button, Sir Thomas, voyage to Hudson's Bay, 628
Bylot, Robert, voyage to Hudson's Bay, 632

C.

CABOT, SEBASTIAN, early voyages to Hudson's Bay, 619
Chakrata, mean decrement of temperature at, 459
China, Southern and South-western, Explorations in, by Archibald R. Colquhoun, 3 *et seq.*
Ching-tung plain, 35
Chikok rope made by Mijûs, 530
Chose's village to the Dalei, Mr. Needham's route from, 491
Chûâ river, 528
Chulikata tribe, 502
Churchill, Hudson's Bay, 659
Clyde river, estuary of, 478
Colquhoun, Archibald R., Exploration in Southern and South-western China, 3 *et seq.*
Cooper, J. T., journey along the Brahmaputra, 489, 494
Copeland, Mr. F., on decrement of temperature, 458
Cyrenaica and Tripoli, A Bibliography of the, by Sir R. Lambert Playfair, 562 *et seq.*

D.

DÂLEI river, 492, 521
——— to the Zayul frontier, Mr. Needham's route from the, 493
Darjeeling, mean decrement of temperature at, 459
Davis, John, voyage to Hudson's Bay, 620
Digâru tribe, 500 *et seq.*
——— villages, list of, 513
Digges Island, Hudson's Strait, 657
Dihong river, 498
Dingtî river, 538
Dornoch Firth, salinity and temperature of, 482, 483
Duncan, Mr., voyage to Hudson's Bay, 648

E.

EN-LO town, 35

F.

FORTH, Firth of, illustrating divisions of a river, 476–478
FOX, Captain Luke, voyage to Hudson's Bay, 637, 638

Frobisher, Martin, voyage to Hudson's Bay, 620
Fu-ho or Kwei river, 4

G.

GÁMING country, 521
Gibbons, Captain, voyage to Hudson's Bay, 632
Gillam, Captain Z., voyage to Hudson's Bay, 645
Glaisher, Mr., On Barometrical Measurements, 443, 444
——— Tables showing mean rate of decrement of temperature made in balloon ascents by, 453
Gomez, Estevan, voyage to Hudson's Bay, 621
Griffith, Dr., journey along the Brahmaputra, 489
Grosseliez, M. de, voyage to Hudson's Bay, 645

H.

HAI-IMSONG'S village, 510
Halai river, 526
Hawkridge, Captain, voyage to Hudson's Bay, 635
Himalayas, barometrical observations in the, 459, 460
Hispaniola, Bibliographical Chronology, 93
——— Bibliography and Cartography of, by H. Ling Roth, 41 *et seq.*
——— Bibliography of, Anonymous publications, 81
——— ——— Authors Catalogue, 45
——— ——— Index to Authors and Anonymous publications, 95
——— ——— Maps, Charts, and Plans, 88
——— ——— Parliamentary publications, 87
Hooker, Sir Joseph, on Barometrical Observations in the Himalayas, 459
Hudson, Henry, voyages of, 622, 623, 624
Hudson's Bay and Strait, by Commodore A. H. Markham, 617 *et seq.*
——— Strait, observation stations in, 653
——— ——— character of ice in, 656, 657
Hwang-chau town, 8

I.

I-LONG lake, Southern China, 28, 29

J.

JAMES, Captain, voyage to Hudson's Bay, 641
Joshimath to Niti, decrement of temperature, 460

K.

KAI-HUA, town of, 24
Kaîsha, Mishmi chief, capture of, 501, 502
Kalang river, 532
Kânau village, 542
Kilwa Kivinji and the Rovuma, Lieut. Stewart Smith's Explorations between, 101 *et seq.*
Kitanda hill, East Africa, 113
Kôchû river, 542
Kota to Almora, decrement of temperature, 460
Krick, M., journey along the Brahmaputra, 489
Krondong's house, 535
Kuei-chau to Kai-hua, road from, 21
Kwang-nan, 21
Kwei-chau, Southern China, 19
Kwei-yuen town, 7

L.

LÂMÂT tribe, 532
Lin-an town and plain, 27, 28
Lohit Brahmaputra, Mr. J. F. Needham's Journey along the, 487 *et seq.*
Lukumbi hill, East Africa, 103
Lukwika river, 116
Lumesule river, East Africa, 116
Lüsê Mîjû village, 533
Lûtî river, 531
Lysien river, 32

M.

MAGOJONI, position of, 123
Mâ-nek'rê country, 538
Mányo tribe, 500, 501
Manyunyu, position of, 109
Markham, Commodore A. H., Hudson's Bay and Strait, 617 *et seq.*
Martins, M. Charles, on Barometrical Measurements, 437
Matoo mountain, East Africa, 111
M'daun or Dû river, 522
Measurement of Heights by the Barometer, On the, by John Ball, 443 *et seq.*
Mendeleef, M., on Barometrical Measurements, 465
Men-tzu, town of, 25, 26
Middleton, Captain, Voyage to Hudson's Bay, 647
Miesing, Tables of Barometrical Observations on the, 463, 464
Mîjû clans, names of, 527
Mîju tribe, 504, 512, 522
Mill, Hugh Robert, River Entrances, 475 *et seq.*
Mishmi tribes, 500 *et seq.*
Môing village, 527
Mong-hoa plain and city, 38
Mong-kong town, 5
Moor, Captain, voyage to Hudson's Bay, 647

Mpuemu, Itinerary of Lieut. Smith's journey to, 108
——— position of, 109
Msenjere river, East Africa, 114
Mtola's village, Universities' Mission at, 105, 117
Mtua district, East Africa, 103
Mtumwa hill, 110
Munk, Captain Jens, voyage to Hudson's Bay, 635
Murree, mean decrement of temperature at, 459
Mwabila village, 124

N.

Nagong Chu river, 498
Nakiu river, 110
Nam-tsing-tsing pagoda, 36
Nan-ning town, 10
Needham, Mr., Extracts from Diary kept on the Journey along the Lohit Brahmaputra, 507 *et seq.*
——— J. F., Journey along the Lohit Brahmaputra, 487 *et seq.*
Niti to Kogsa and Lanjar Peak, decrement of temperature, 460

P.

Pa-oi, Southern China, 18
Papien river, 32, 34
Parry, Sir Edward, Voyage to Hudson's Bay, 649
Pe-sê to Ssŭ-mao, Mr. Colquhoun's journey from, 17 *et seq.*
Pictet, M., on Barometrical Measurements, 434
Plantamour, M., on Barometrical Measurements, 436
Playfair, Sir R. Lambert, A Bibliography of Algeria, 129 *et seq.*
——— ——— A Bibliography of the Barbary States. Part I. Tripoli and the Cyrenaica, 559 *et seq.*
Puerh-fu, 33
Punjab, Northern, mean decrement of temperature, 459

R.

Ramond, M., on Barometrical Measurements, 434
Renny, Lieut., on Barometrical Measurements, 437
Rima and Sadiya, Mr. Needham's journey between, 487 *et seq.*
——— Mr. Needham's reception on arriving near, 545–50
——— river, 499–500
Ritia to Dudatoli, decrement of temperature, 460
River Entrances, by Hugh Robert Mill, 475 *et seq.*
Rivers, salinity, amount of suspended matter and temperature of the estuary of, 480, 481
Rong Thod Chu, the, 498
Roth, H. Ling, Bibliography and Cartography of Hispaniola, 41 *et seq.*
Rovuma, Itinerary of Lieut. Smith's journey to the, 109
Rowlatt, Lieut., journey along the Brahmaputra, 489, 492
Rühlmann, Dr., on Barometrical Measurements, 462

S.

Sadiya and Rima, Mr. Needham's journey between, 487 *et seq.*
——— to Rima, Abstract statement of Mr. Needham's route from, 505–7
——— to Támemukh, Mr. Needham's route from, 490
Sa-mê village, 543
Sangu or Singu village, 496
Sanpo, identity of the, with the Dihong, 499
San-tai-pan, 30
Sâ river, 528
Shimba Country, Lieut. Smith's explorations in the, 119 *et seq.*
Sikkî river, 537
Smith, Lieut. C. Stewart, Explorations in Zanzibar Dominions, by, 101 *et seq.*
Spey river, estuary of, 478
Ssŭ-mao town, 33
——— to Tali, Mr. Colquhoun's journey from, 34
St. Robert, Count Paul de, on Barometrical Measurements, 443, 468
Sumjî river, 529

T.

Taieng tribe, 500
Tâkûlong's village, 517
Tali lake, 39
Támemukh to Chose's village, Mr. Needham's route from, 490
Tay river, estuary of, 478
Tedêng river, 511
Thames river, estuary of, 478
Tibet, route into, by way of the Brahmaputra, 489
Tong-kwan, town of, 32
Tripoli and the Cyrenaica, a Bibliography of, by Sir R. Lambert Playfair, 562 *et seq.*
——— Bibliography of, Index of Authors, 612 *et seq.*
——— ——— Index of Subjects, 609 *et seq.*
——— ——— Public Records, Tripoli Archives, 605
——— Province of, Historical Account of, 560
Tsun-chau-fu town, 6
Tung-chuen town, 6

U.

Umbe Kuru river, East Africa, 112

V.

VAUGHAN, Captain, voyage to Hudson's Bay, 646

W.

WABONDEI tribe, 122
Wadigo tribe, 119, 120
Wagwangwara tribe, 104
Wâlong country, 538
——— village, 497
Watî river, 529
Waymouth, Captain G., voyage to Hudson's Strait, 620
Welsh and Glaisher, Messrs., Tables showing mean rate of Decrement of Temperature found in balloon ascents by, 453
Whymper, Mr., on decrement of temperature, 457
Wilcox, Captain, journey along the Brahmaputra, 489–94
Woiekof, M., on barometrical measurements, 466
Wuchau to Pe-sê, Mr. Colquhoun's journey from, 3 *et seq.*

Y.

YORK FACTORY, Hudson's Bay, 659
Yuan-chiang valley, 30
Yünnan, plateau of, 21
———, South-eastern, trade of, 31

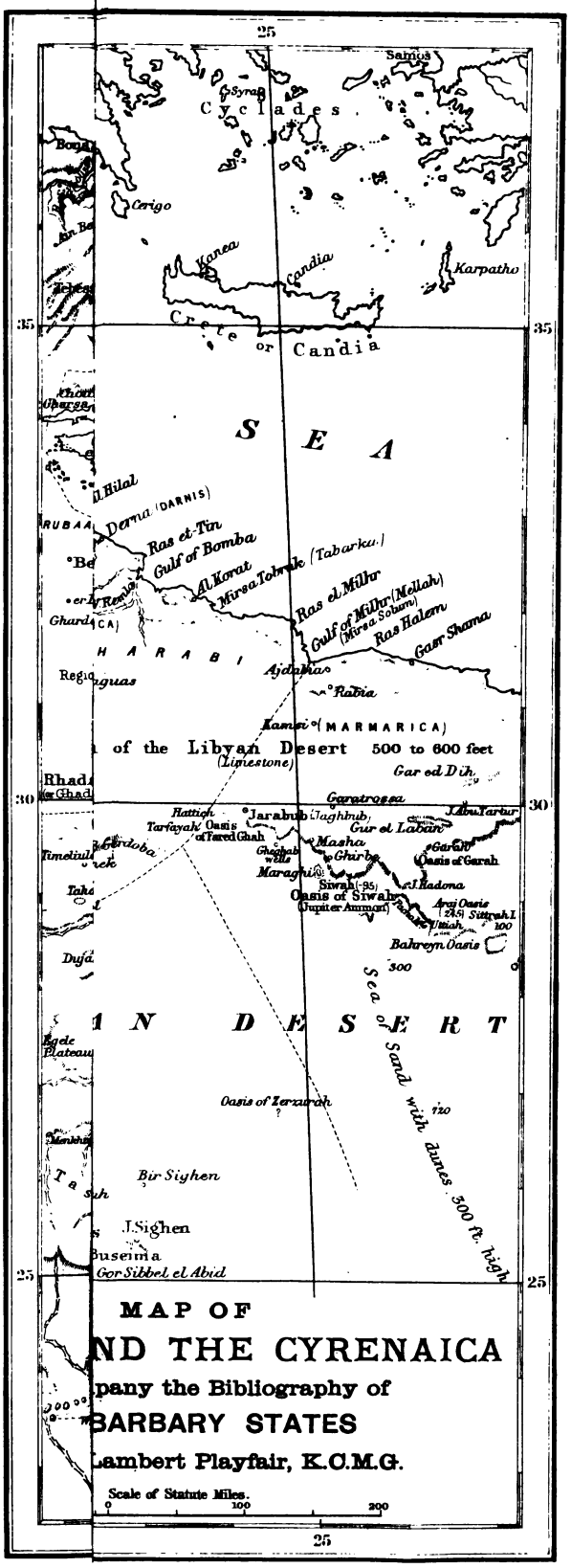
Z.

ZANZIBAR DOMINIONS, Explorations in, by Lieut. Ch. Stewart Smith, 101 *et seq.*
——— ———, slave trade in the, 104, 105
Zayul valley, 495, 496

MAPS AND DIAGRAMS.

China, South-western, from Wu-chau to Tali, surveyed by A. R. Colquhoun, Sheets I. & II., 126
Dornoch Firth, Diagram of Tidal variation of Salinity and Temperature, 483
Forth, Firth of, Diagram of variation of Salinity and Temperature with depth, 482
Kilwa to the Rovuma, Map illustrating Mr. Smith's journey from, 126
Lohit Brahmaputra, Sketch Map of, 556
Mombasa, Map illustrating Mr. Smith's journey near, 126
River Entrance, Diagram to illustrate typical divisions of a, 477
Tripoli and the Cyrenaica, Map of, 664

LONDON: PRINTED BY WM. CLOWES AND SONS, LIMITED, STAMFORD STREET AND CHARING CROSS.



W. & A.K. Johnston, Edinburgh & London.